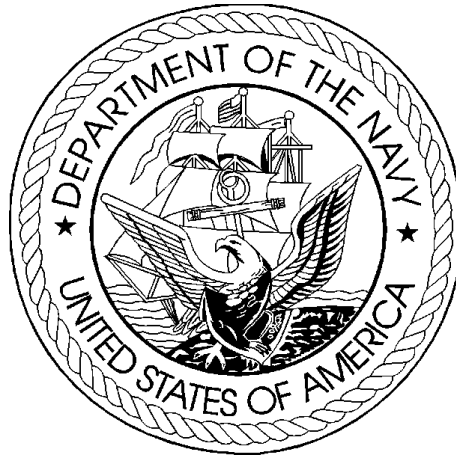


DEPARTMENT OF THE NAVY
FISCAL YEAR (FY) 2003
BUDGET ESTIMATES



JUSTIFICATION OF ESTIMATES
FEBRUARY 2002

WEAPONS PROCUREMENT, NAVY

UNCLASSIFIED
Department of the Navy
FY 2003 Procurement Program
SUMMARY
(\$ IN MILLIONS)

Exhibit P-1
DATE: February 2002

Appropriation: Weapons Procurement, Navy ACTIVITY ----- 1. Ballistic Missiles 2. Other Missiles 3. Torpedoes and Related Equipment 4. Other Weapons 6. Spares and Repair Parts	FY 01 ----- 437.7 766.6 98.9 66.5 52.4 ----- 1,422.1	FY 02 ----- 539.5 638.9 119.2 71.6 48.4 ----- 1,417.6	FY 03 ----- 587.2 984.8 159.6 45.0 55.9 ----- 1,832.6
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UNCLASSIFIED

Department of the Navy

FY 2003 Procurement Program

Exhibit P-1

APPROPRIATION: 1507N Weapons Procurement, Navy

DATE: February 2002

				TOA, \$ IN MILLIONS										
LINE NO	ITEM NOMENCLATURE	IDENT CODE	(DOLLARS) FY 2003 UNIT COST	-----FY 2001----		-----FY 2002----		-----FY 2003----		S E C				
				QUANTITY	COST	QUANTITY	COST	QUANTITY	COST					
BUDGET ACTIVITY 01: Ballistic Missiles														

Ballistic Missiles														
1	1150 Trident II	A	49,921,250	12	443.0	12	543.5	12	599.1	U				
	Less: Advance Procurement (PY)				-25.8		-13.9		-13.1					
					-----		-----		-----					
					417.2		529.6		585.9					
2	1150 Trident II	A								U				
	(FY 2001 for 2002) (MEMO)				12.3		-		-					
	(FY 2001 for 2003) (MEMO)				2.9		-		-					
	(FY 2001 for 2004) (MEMO)				2.9		-		-					
	(FY 2001 for 2005) (MEMO)				1.2		-		-					
	(FY 2002 for 2003) (MEMO)				-		8.7		-					
Support Equipment And Facilities														
3	1350 Missile Industrial Facilities	A			1.2		1.3		1.3	U				
					-----		-----		-----					
TOTAL	Ballistic Missiles				437.7		539.5		587.2					

* ITEMS UNDER \$50,000

UNCLASSIFIED

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UNCLASSIFIED

Department of the Navy

FY 2003 Procurement Program

Exhibit P-1

APPROPRIATION: 1507N Weapons Procurement, Navy

DATE: February 2002

LINE NO	ITEM NOMENCLATURE	IDENT CODE	(DOLLARS) FY 2003 UNIT COST	TOA, \$ IN MILLIONS						S E C
				-----FY 2001-----		-----FY 2002-----		-----FY 2003-----		
				QUANTITY	COST	QUANTITY	COST	QUANTITY	COST	
BUDGET ACTIVITY 02: Other Missiles										

Strategic Missiles										
4	2101 Tomahawk	A	1,375,660		-	32	74.0	106	145.8	U
5	2307 ESSM		887,329	29	39.4	26	41.7	146	129.6	U
Tactical Missiles										
6	2206 AMRAAM	A	509,370	63	37.6	57	36.7	100	50.9	U
7	2209 Sidewinder	A	180,508		-	105	24.2	295	53.3	U
8	2230 JSOW	B	384,399	29	161.3		-	363	139.5	U
9	2231 SLAM-ER		698,175	30	23.8	30	26.0	120	83.8	U
10	2234 Standard Missile	A	1,681,968	86	171.9	96	156.2	93	156.4	U
11	2242 RAM	A	648,656		22.7	90	42.7	90	58.4	U
12	2254 Hellfire	A			19.8		-		-	U
13	2280 Aerial Targets	A			57.8		58.4		70.3	U
14	2285 Drones and Decoys	A			14.9		13.9		-	U
15	2290 Other Missile Support	A			14.7		9.7		12.0	U
Modification Of Missiles										
16	2315 Sidewinder Mods	A		63	27.3		.8		.6	U
17	2327 HARM Mods	A			-		-		5.0	U
18	2356 Standard Missiles Mods	A	624,033	80	49.0	58	35.1	90	56.2	U
Support Equipment And Facilities										
19	2420 Weapons Industrial Facilities	A			29.1		35.9		17.7	U
20	2430 Fleet Satellite Comm (MYP) (Space)	A			94.7		-		-	U

* ITEMS UNDER \$50,000

UNCLASSIFIED

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UNCLASSIFIED

Department of the Navy

FY 2003 Procurement Program

Exhibit P-1

APPROPRIATION: 1507N Weapons Procurement, Navy

DATE: February 2002

		TOA, \$ IN MILLIONS									
LINE NO	ITEM NOMENCLATURE	IDENT CODE	(DOLLARS) FY 2003 UNIT COST	-----FY 2001----		-----FY 2002----		-----FY 2003----		S	E
				QUANTITY	COST	QUANTITY	COST	QUANTITY	COST		
21	2433 Fleet Satellite Comm Follow-On	A			.*		77.2		-	U	
	Less: Advance Procurement (PY)				.*		-		-		
					-----		-----		-----		
					-		77.2		-		
Ordnance Support Equipment											
22	2500 Ordnance Support Equipment	A			2.7		6.7		5.4	U	
					-----		-----		-----		
TOTAL	Other Missiles				766.6		638.9		984.8		

* ITEMS UNDER \$50,000

UNCLASSIFIED

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UNCLASSIFIED

Department of the Navy

FY 2003 Procurement Program

Exhibit P-1

APPROPRIATION: 1507N Weapons Procurement, Navy

DATE: February 2002

LINE NO	ITEM NOMENCLATURE	IDENT CODE	(DOLLARS) FY 2003 UNIT COST	TOA, \$ IN MILLIONS						
				-----FY 2001-----		-----FY 2002-----		-----FY 2003-----		
				QUANTITY	COST	QUANTITY	COST	QUANTITY	COST	S E C
BUDGET ACTIVITY 03: Torpedoes and Related Equipment										

Torpedoes And Related Equipment										
23	3141 ASW Targets	A			3.1		15.2		14.3	U
Mod Of Torpedoes And Related Equip										
24	3215 MK-46 Torpedo Mods	A			7.0		7.4		38.8	U
25	3225 MK-48 Torpedo ADCAP Mods	A			42.9		42.0		62.1	U
26	3231 Quickstrike Mine	B			1.9		3.9		2.0	U
Support Equipment										
27	3301 Torpedo Support Equipment	A			23.4		29.8		25.1	U
28	3302 ASW Range Support	A			18.7		18.2		14.5	U
Destination Transportation										
29	2410 First Destination Transportation	A			1.8		2.8		2.8	U
TOTAL Torpedoes and Related Equipment					98.9		119.2		159.6	

* ITEMS UNDER \$50,000

UNCLASSIFIED

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UNCLASSIFIED

Department of the Navy

FY 2003 Procurement Program

Exhibit P-1

APPROPRIATION: 1507N Weapons Procurement, Navy

DATE: February 2002

LINE NO	ITEM NOMENCLATURE	IDENT CODE	(DOLLARS) FY 2003 UNIT COST	TOA, \$ IN MILLIONS						S E C
				-----FY 2001-----		-----FY 2002-----		-----FY 2003-----		
				QUANTITY	COST	QUANTITY	COST	QUANTITY	COST	
BUDGET ACTIVITY 04: Other Weapons										

Guns And Gun Mounts										
30	4129 Small Arms and Weapons	A			4.0		.9		2.9	U
31	4225 Airborne Mine Neutralization Systems				-		-		1.5	U
Modification Of Guns And Gun Mounts										
32	4205 CIWS Mods	A			25.9		44.1		32.2	U
33	4217 Gun Mount Mods				29.9		26.5		8.4	U
Other										
34	4500 Cancelled Account Adjustments	A			5.3		-		-	U
35	4502 Cancelled Account Adjustments				.1		-		-	U
36	4602 Cancelled Account Adj (89)				.*		-		-	U
37	4610 Judgement Fund	A			1.3		-		-	U
TOTAL Other Weapons					66.5		71.6		45.0	

* ITEMS UNDER \$50,000

UNCLASSIFIED

PAGE N- 6

Fiscal Year 2003 Budget Estimates
Budget Appendix Extract Language

WEAPONS PROCUREMENT, NAVY (WPN)

For construction, procurement, production, modification, and modernization of missiles, torpedoes, other weapons, and related support equipment including spare parts, and accessories therefore; expansion of public and private plants, including the land necessary therefore, and such lands and interests therein, may be acquired, and construction prosecuted thereon prior to approval of title; and procurement and installation of equipment, appliances, and machine tools in public and private plants; reserve plant and Government and contractor owned equipment layaway, [\$1,429,592,000] \$1,832,617,000, to remain available for obligation until September 30, [2004] 2005. (*10 U.S.C. 5013, 5062; Department of Defense Appropriations Act, 2002.*)

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET								DATE JANUARY 2002		
APPROPRIATION/BUDGET ACTIVITY WEAPONS PROCUREMENT, NAVY / BUDGET ACTIVITY 1 BALLISTIC MISSILES				P-1 ITEM NOMENCLATURE TRIDENT II MISSILE UGM-133A (D-5)						
\$ in Millions	Prior Years	FY 01	FY 02	FY 03	FY 04	FY 05	FY06	FY07	To Complete	Total Program
QUANTITY	372	12	12	12	12	5			115	540
End Cost	\$13,629.0	\$455.0	\$585.1	\$713.2	\$846.9	\$838.7	\$958.6	\$1,000.4	\$8,621.4	\$27,648.3
Less: Prior Year Adv. Proc.	(\$1,587.4)	(\$37.8)	(\$55.6)	(\$127.3)	(\$153.3)	(\$49.8)	\$0.0	\$0.0	(\$479.1)	(\$2,490.3)
Current Year Full Funding	\$12,041.6	\$417.2	\$529.5	\$585.9	\$693.6	\$788.9	\$958.6	\$1,000.4	\$8,142.3	\$25,158.0
Plus: Current Year Adv. Proc.	\$2,462.3	\$19.3	\$8.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$2,490.3
Plus: Initial Spares	\$35.4	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$35.4
Total New Obligational Authority	\$14,539.3	\$436.5	\$538.2	\$585.9	\$693.6	\$788.9	\$958.6	\$1,000.4	\$8,142.3	\$27,683.7
Missile Flyaway Unit Cost 1/	\$14.9	\$22.9	\$23.7	\$24.3	\$24.8	\$25.2	\$0.0	\$0.0		\$16.0

The TRIDENT II missile is carried on OHIO CLASS Fleet Ballistic Missile Submarines, ensuring that the United States continues to maintain a highly survivable strategic deterrent well into the 21st century. Deployment of the TRIDENT II missile (1) enhances Fleet Ballistic Missile Submarine survivability by increasing Sea Launched Ballistic Missile range at full payload to exploit the total patrol area available to the TRIDENT submarine, (2) minimizes total weapon system costs by increasing Sea Launched Ballistic Missile payload to the level permitted by the size of the TRIDENT submarine launch tube, thereby allowing mission capability to be achieved with fewer submarines, and (3) balances the Triad by adding efficient hard target kill capability to the Sea Launched Ballistic Missile.

Funding in this line is required to support the procurement of TRIDENT II missiles, initial production of which commenced in FY 1987 and supported a TRIDENT II missile Initial Operational Capability (IOC) in March 1990. Beginning in FY 2001, funds are included for D-5 life extension to ensure that Strategic Weapons System life matches the extended Ohio-class hull life.

The FY 2002 full funding request of \$529.5 million includes \$410.8 million to procure missiles at the minimum sustaining rate of 12 per year necessary to maintain weapon system quality, reliability, safety, and affordability and \$118.7 million for D-5 life extension to sustain production of D-5 missile motors and other critical components. The \$410.8 million funding request will support the production of 12 TRIDENT II missiles, additional reentry systems hardware, continued support required to maintain SWFLANT's TRIDENT II missile processing capability, and equipment procurements associated with establishing a limited TRIDENT II capability at the Strategic Weapons Facility, Pacific (SWFPAC) at Bangor, WA. Funding provides for a 14 SSBN TRIDENT II program, which assumes the backfit of four C-4 boats to the D-5 configuration. The \$118.7 million D-5 life extension funding request procures D-5 missile motors and other critical components required to support the extended 44-year SSBN hull life.

The FY 2003 full funding request of \$585.9 million includes \$338.6 million to procure missiles at the minimum sustaining rate of 12 per year necessary to maintain weapon system quality, reliability, safety, and affordability and \$250.5 million for D-5 life extension to sustain production of D-5 missile motors and other critical components. The \$338.6 million full funding request will support the production of 12 TRIDENT II missiles, additional reentry systems hardware, continued support required to maintain SWFLANT's TRIDENT II missile processing capability, and equipment procurements associated with establishing a limited TRIDENT II capability at the Strategic Weapons Facility, Pacific (SWFPAC) at Bangor, WA. Funding provides for a 14 SSBN TRIDENT II program, which assumes the backfit of four C-4 boats to the D-5 configuration. The \$250.5 million D-5 life extension funding request procures D-5 missile motors and other critical components required to support the extended 44-year SSBN hull life and commences redesign of the guidance system and missile electronics, which must be replaced to support the extended service life.

The Navy requests the addition of specific language in the FY 2003 DoD Appropriations Bill as follows: "The Weapons Procurement, Navy appropriation includes \$17.067 million of cash payments to be deposited in the UK Trust Fund under the terms of the 28 July 1998 Secretary of Defense Memorandum of Understanding (MOU) with the United Kingdom." The financial addendum to the MOU specifies annual payments totaling \$50.7 million for FY 2001 - FY 2005 subject to Congressional authorization and appropriation. These funds purchase D-5 missile components required for the U.S. program and are included within the full funding request for airframe and motor flyaway costs.

1/ Unit cost shown is flyaway airframe and motor unit cost of which \$4.6M for FY 2002 and \$10.6M for FY 2003 was funded in prior years' Advance Procurement. Costs shown in the Total New Obligational Authority line include guidance systems, warhead components, flight test instrumentation, arms control and recurring production support costs.

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WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5)				A. WEAPONS PROCUREMENT, NAVY BUDGET ACTIVITY 1		B. UGM-133A TRIDENT II (D-5) MISSILE (31DL)		C. LOCKHEED MARTIN MISSILES AND SPACE CO. SUNNYVALE, CA		D. JANUARY 2002		
WEAPON SYSTEM COST ELEMENTS		Ident. Code			FY 01 Unit cost	Qty	TOTAL COST	FY02 Unit cost	Qty	TOTAL COST	FY03 Unit cost	Qty
<u>MISSILE H/W - RECURRING</u>							<u>1/</u>			<u>1/</u>		<u>1/</u>
1 AIRFRAME & MOTOR FLYAWAY COST					22,900	12	274,800	23,660	12	283,920	24,050	12
2 GUIDANCE FLYAWAY COST					10,590	4	42,360			0		0
3 SUBTOTAL MISSILE AND GUIDANCE FLYAWAY COST							317,160			283,920		288,600
LESS: PRIOR YEAR ADVANCE PROCUREMENT							(37,808)			(55,624)		(127,264)
4 SUBTOTAL MISSILE AND GUIDANCE NEW OBLIGATIONAL AUTHORITY (NOA)							279,352			228,296		161,336
1/ Includes payments for FY 2001 through FY 2003 of \$5,155, \$9,469 and \$17,067 to the UK Trust Fund.												
<u>SUPPORT COSTS</u>												
5 WARHEAD COMPONENTS							5,700			19,100		21,400
6 SPECIAL PURPOSE INSTRUMENTATION							25,200			40,400		62,500
7 SPECIAL PURPOSE TOOLING & TEST EQUIPMENT							12,750			13,400		13,600
8 INF TREATY SUPPORT							2,900			0		0
9 ARMS CONTROL							0			2,900		2,300
10 CONTAINERS							40			40		40
11 SYSTEM INTEGRATION & PLANNING							11,800			12,150		12,400
12 SWFLANT PRODUCTION SUPPORT							12,000			12,500		12,800
13 SUPPORTABILITY MODS							8,050			8,250		7,400
14 GUIDANCE PARTS PROCUREMENT							3,800			6,429		6,800
15 SWFPAC PRODUCTION SUPPORT							10,600			14,100		17,800
16 EOP MISSILE AND GUIDANCE COSTS							0			38,000		0
17 PIGA							12,300			15,300		17,000
18 D5 LIFE EXTENSION							32,703			118,699		250,540
SUBTOTAL SUPPORT COST NOA							137,843			301,268		424,580
CURRENT YEAR FULL FUNDING							417,195			529,564		585,916
PLUS: CURRENT YEAR ADVANCE PROCUREMENT							19,314			8,654		0
NET TRIDENT II COST							436,509			538,218		585,916
PLUS: INITIAL SPARES							0			0		0
TOTAL NEW OBLIGATIONAL AUTHORITY							436,509			538,218		585,916

P-1 Shopping List
Item No.
1

Page No.
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BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)							DATE: JANUARY 2002			
B. WEAPONS PROCUREMENT NAVY BUDGET ACTIVITY 1							P-1 ITEM NOMENCLATURE: TRIDENT II MISSILE UGM-133A (D-5)			
COST ELEMENT/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES, WHEN AVAILABLE
1. TRIDENT II MSL. FY 2001	LOCKHEED MARTIN MISSILES AND SPACE CO. (LMMS) SUNNYVALE, CA	SS/CPIF	STRATEGIC SYSTEMS PROGRAMS (SSP)	10/99	10/01	12	22,900	YES	NO	
FY 2002	LMMS	SS/CPIF	SSP	10/01	10/03	12	23,660	YES	NO	
FY 2003	LMMS	SS/CPIF	SSP	10/02	10/04	12	24,050	YES	NO	
D. REMARKS										

[illegible]

[illegible]

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[illegible]

TRIDENT II PROCUREMENT ANNEX

	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>TO COMP</u>
WEAPON SYSTEM COST	468,175	455,003	585,188	713,180	846,880	838,670	958,604	1,000,382	8,621,413
ADVANCE PROCUREMENT (PY)	(34,725)	(37,808)	(55,624)	(127,264)	(153,268)	(49,795)	0	0	(479,113)
CURRENT YEAR PROGRAM	433,450	417,195	529,564	585,916	693,612	788,875	958,604	1,000,382	8,142,300
ADVANCE PROCUREMENT (CY)	51,260	19,314	8,654	0	0	0	0	0	0
TOTAL	484,710	436,509	538,218	585,916	693,612	788,875	958,604	1,000,382	8,142,300

<u>FY OF</u>	<u>\$</u>	<u>FY00</u>	<u>FY01</u>	<u>FY02</u>	<u>FY03</u>	<u>FY04</u>	<u>FY05</u>	<u>FY06</u>	<u>FY07</u>	<u>TO</u>
<u>FUNDING</u>										<u>COMP</u>
1985	24,400	0	0	0	0	0	0	0	0	212
1986	235,713	0	0	0	0	0	0	0	0	0
1987	264,385	0	0	0	0	0	0	0	0	0
1988	309,578	2,830	2,830	1,030	1,030	618	143	0	0	65,863
1989	228,063	2,200	2,200	600	600	700	250	0	0	59,113
1990	216,131	1,500	1,500	500	500	600	202	0	0	75,129
1991	176,665	1,300	1,300	300	300	400	107	0	0	50,220
1992	218,000	1,400	1,400	600	600	600	214	0	0	104,146
1993	223,000	1,100	1,100	500	500	500	178	0	0	68,572
1994	116,262	1,600	1,600	500	500	500	178	0	0	55,104
1995	53,376	245	245	32,745	6,745	245	85	0	0	154
1996	185,379	800	800	800	99,200	57,079	300	0	0	600
1997	57,934	0	0	0	0	47,199	0	0	0	0
1998	49,533	5,750	2,550	2,000	0	3,233	29,500	0	0	0
1999	52,625	16,000	1,550	2,150	4,150	28,775	0	0	0	0
2000	51,260		20,733	1,585	1,585	9,919	17,438	0	0	0
2001	19,314			12,314	2,900	2,900	1,200	0	0	0
2002	8,654				8,654	0	0	0	0	0
2003	0					0	0	0	0	0
2004	0						0	0	0	0
TOTAL	2,490,272	34,725	37,808	55,624	127,264	153,268	49,795	0	0	479,113

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BUDGET ITEM JUSTIFICATION SHEET							DATE JANUARY 2002			
APPROPRIATION/BUDGET ACTIVITY WEAPONS PROCUREMENT, NAVY / BUDGET ACTIVITY 1 BALLISTIC MISSILES				P-1 ITEM NOMENCLATURE TRIDENT II ADVANCE PROCUREMENT						
	Prior Years	FY01	FY02	FY03	FY04	FY05	FY06	FY07	To Complete	Total Program
QUANTITY	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cost (in millions)	\$2,462.3	\$19.3	\$8.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$2,490.3
Initial Spares	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total (in Millions)	\$2,462.3	\$19.3	\$8.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$2,490.3
Unit Cost (in Millions)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Funding in this line item provides for the advance procurement of various components, subassemblies and raw materials which are required to support the future production and processing of TRIDENT II (D-5) missiles and MK-6 guidance systems. Total advance procurement requirements comprise two major subsets of commodity acquisition: traditional, or long lead advance procurement, which includes those items having longer manufacturing leadtimes than the using D-5 items; and production continuity advance procurement, which entails the purchase of certain critical components earlier than leadtimes alone would dictate to ensure their continuous production. These latter production continuity procurements encompass a broad range of components and materials which must be produced at minimum, uninterrupted rates on dedicated production lines as well as life-of-type or one-time quantity buys of items required to support the total planned program. The quality and homogeneity obtained by these means are essential to assure the consistent performance reliability of the missiles to be procured for the TRIDENT II program.

The FY 2002 request will provide \$8.7 million for the advance procurement of long lead items required to support the FY 2003 full funded manufacture of D-5 missiles.

DD FORM 2454, JUL 88

P-1 SHOPPING LIST
ITEM NO PAGE NO
2 1

EXHIBIT P-40 BUDGET ITEM JUSTIFICATION SHEET

UNCLASSIFIED

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WEAPON SYSTEM ADVANCE PROCUREMENT EXHIBIT (P-10) (PROCUREMENT OF ADVANCE DESIGN AND MATERIAL)					FY 2001 FOR FY 2002	
(TOA, Dollars in tenths of Millions)					DATE: JANUARY 2002	
Weapon System Type -		First System Award Date		First System Completion Date		Interval Between System Completions
UGM 133A TRIDENT II MISSILE		FY 1987		FY 1989		
Advance Procurement/Advance Funding Items	Quantity	End Item			Unit Cost	Total Cost
		Date Contract Award Planned/Required	Delivery Date of First Equipment Required	Production Lead Time in Months (Adm/Prod)-Total		
1. CFE						
AIRFRAME AND MOTOR LONG LEAD	12	10/01 *	10/03 *	9/24	0.8	9.4
AIRFRAME PRODUCTION CONTINUITY						9.9
TOTAL						19.3
Narrative Description Long Lead funding allows for the delivery of TRIDENT II missiles in 2 versus 3 years. Production continuity funds are required for life-of-type procurements and to maintain continuous production for critical components at the lowest sustaining rate consistent with quality, reliability, safety and cost. * Long Lead procurements are awarded in the preceding year. The dates shown pertain to the full funded D-5 missiles to which the Long Lead will be applied.						

UNCLASSIFIED

WEAPON SYSTEM ADVANCE PROCUREMENT EXHIBIT (P-10) (PROCUREMENT OF ADVANCE DESIGN AND MATERIAL)					FY 2002 FOR FY 2003	
(TOA, Dollars in tenths of Millions)					DATE: JANUARY 2002	
Weapon System Type -		First System Award Date		First System Completion Date		Interval Between System Completions
UGM 133A TRIDENT II MISSILE		FY 1987		FY 1989		
Advance Procurement/Advance Funding Items	Quantity	End Item			Unit Cost	Total Cost
		Date Contract Award Planned/Required	Delivery Date of First Equipment Required	Production Lead Time in Months (Adm/Prod)-Total		
1. CFE AIRFRAME AND MOTOR LONG LEAD	12	10/02 *	10/03 *	9/24	0.7	8.7
TOTAL						8.7
Narrative Description Long Lead funding allows for the delivery of TRIDENT II missiles in 2 versus 3 years.						
* Long Lead procurements are awarded in the preceding year. The dates shown pertain to the full funded D-5 missiles to which the Long Lead will be applied.						

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BUDGET ITEM JUSTIFICATION SHEET								DATE JANUARY 2002		
APPROPRIATION/BUDGET ACTIVITY WEAPONS PROCUREMENT, NAVY / BUDGET ACTIVITY 1 BALLISTIC MISSILES				P-1 ITEM NOMENCLATURE MISSILE INDUSTRIAL FACILITIES						
	Prior Years	FY 01	FY 02	FY 03	FY 04	FY 05	FY 06	FY 07	To Complete	Total Program
QUANTITY	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cost (in millions)	N/A	\$1.2	\$1.3	\$1.3	\$1.3	\$1.4	\$1.4	\$1.4	N/A	N/A
Initial Spares	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total (in Millions)	N/A	\$1.2	\$1.3	\$1.3	\$1.3	\$1.4	\$1.4	\$1.4	N/A	N/A
Unit Cost (in Millions)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<p>Funding for Missile Industrial Facilities provides for capital maintenance projects at Navy-owned Naval Industrial Reserve Ordnance Plants (NIROPS) at Sunnyvale and Santa Cruz, California, and Bacchus, Utah, in support of the Fleet Ballistic Missile program.</p> <p>Projects planned in FY 2002 and FY 2003 include additions and modifications to, and rehabilitation of, civil works, non-severable equipment, and real property. Among those projects are upgrades and improvements such as upgrading building electrical systems, replacing conductive floors, replacing insulation, replacing water and steam piping, paving roads and parking areas and painting buildings.</p>										

DD FORM 2454, JUL 88

P-1 SHOPPING LIST

 ITEM NO
3

 PAGE NO
1

EXHIBIT P-40 BUDGET ITEM JUSTIFICATION SHEET

UNCLASSIFIED

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WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5)				A. WEAPONS PROCUREMENT, NAVY BUDGET ACTIVITY 1			B. MISSILE INDUSTRIAL FACILITIES (31DG)		C. LOCKHEED MARTIN MISSILES AND SPACE CO. SUNNYVALE, CA		JANUARY 2002		
WEAPON SYSTEM COST ELEMENTS	Ident. Code	Unit cost	Qty	TOTAL COST	FY 01 Unit cost	Qty	TOTAL COST	FY 02 Unit cost	Qty	TOTAL COST	FY 03 Unit cost	Qty	TOTAL COST
CAPITAL MAINTENANCE							1,223			1,264			1,318
TOTAL MISSILE INDUSTRIAL FACILITIES							1,223			1,264			1,318

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BUDGET ITEM JUSTIFICATION SHEET P-40											DATE: February 2002	
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy							P-1 ITEM NOMENCLATURE TOMAHAWK (J2EL)(PEO(W))(BLI: 210100)					
Program Element for Code B Items: BA2/OTHER MISSILES P.E. # 0204229N							Other Related Program Elements					
	Prior Years	ID Code		FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007	To Complete	Total Program
QUANTITY	4,201	B		0	32	106	314	351	483	469	0	5,956
COST (\$M)	\$7,939.9			\$0.0	\$74.0	\$145.8	\$299.2	\$296.4	\$400.5	\$440.7	\$0.0	9,596.5
Initial Spares (\$M)	\$313.5			\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$313.5
Total (\$M)	\$8,253.4			\$0.0	74.0	145.8	299.2	296.4	400.5	440.7	\$0.0	\$9,910.0
Unit Cost (\$M)	1.965				2.312	1.376	0.953	0.845	0.829	0.940	0.000	1.664
Non Add DERF					350.0							
Non Add Cost of War						598.0	85.0					

Tomahawk provides an attack capability against targets on land (Tomahawk Land Attack Missile (TLAM)), and can be launched from both surface ships (RGM) and submarines (UGM).

Tomahawk consists of six variants: (1) RGM/UGM-109A, Land Attack Nuclear; (2) RGM/UGM-109B, Antiship; (3) RGM/UGM-109C, Land Attack Conventional; (4) RGM/UGM-109D, Land Attack Submunition Dispenser; (5) RGM/UGM-109E, Tactical Tomahawk, (6) RGM/UGM/109H, Tactical Tomahawk Penetrator Variant. The Land Attack Nuclear and Anti-ship versions are no longer in Fleet use. The land-attack version in the Fleet is used for precision destruction of targets at long range.

Production of the Tactical Tomahawk missile begins with Low Rate Initial Production (LRIP) buys of 32 in FY2002 and 106 in FY2003. Full rate production will commence in FY2004. FY04-07 unit cost based on approval of multi-year procurement. If MYP is not approved, additional funds will be required to maintain procurement quantity.

Characteristics and dimensions (approximate)

Weight (with booster and capsule) (UGM-109): 4,300 pounds

Weight (with booster and canister) (RGM-109): 4,000 pounds

Length (with booster): 20.5 feet

Wing Span: 8.6 feet

Cruise Speed: High Subsonic

Contractor: Raytheon Missiles Systems Company

Non Add:

FY 2002 Defense Emergency Response Funding (DERF)/FY 2003 Cost of War (COW):
 \$350 million FY 2002 DERF and \$598M FY 2003 COW funding will remanufacture up to 784 older missiles to Block III configuration. FY 2002 DERF funds awarded under Letter Contract in December 2001; definitization planned for end of February 2002. Final FY 2002 DERF/2003 COW quantity will be determined upon definitization.

FY02 Congressional Add: \$24.5 million for additional tooling and test equipment.

CLASSIFICATION: **UNCLASSIFIED**

WEAPONS PROCUREMENT, NAVY
FY 2003 PRESIDENT'S BUDGET
MISSILE COST ANALYSIS
EXHIBIT P-5
(Dollars in Thousands)

Missile Nomenclature & Popular Name: TOMAHAWK (J2EL)(PEQ(W)) (BLI: 210100)

Date: February 2002

<u>Cost Elements</u>	<u>Prior Years Total Cost</u>	<u>FY 2001 Quantity</u>	<u>Quantity Unit Cost</u>	<u>Total Cost</u>	<u>FY 2002 Quantity</u>	<u>Quantity Unit Cost</u>	<u>Total Cost</u>	<u>FY 2003 Quantity</u>	<u>Quantity Unit Cost</u>	<u>Total Cost</u>
<u>Missile Hardware</u>										
Previous Tomahawk Production	5,611,035									
Tactical Tomahawk					32	1,111	35,552	106	956	101,352
Tactical Tomahawk Penetrator Variant (TTPV)										
Remanufacture (Block III)	<u>592,217</u>									
Total Hardware	6,203,252				32	1,111	35,552	106	956	101,352
<u>Procurement Support</u>										
Product Improvement	378,947									
Systems Engineering	278,645						4,385			6,439
Production Engineering	<u>604,201</u>						<u>3,998</u>			<u>6,008</u>
Total Procurement Support	1,261,793						8,383			12,447
Non-Recurring Tooling							24,500			20,000
Total Flyaway Cost	7,465,045						68,435			133,799
<u>Other Hardware</u>										
CCLS Submarine Capsules					10	138	1,375	33	140	4,620
Canisters					22	47	1,034	73	49	3,557
Ancillary Equipment										
<u>Fleet Support</u>										
Theater Mission Planning Center	255,044									
Support Equipment	113,281						1,120			1,422
Training Equipment	78,019						1,527			1,822
Documentation	<u>28,534</u>						<u>484</u>			<u>600</u>
Total Fleet Support	474,878						3,131			3,844
<u>EOQ/Termination Liability</u>										
Weapon System Cost	7,939,923						73,975			145,820
Initial Spares	<u>313,518</u>									
Total Program Cost	8,253,441						2,312	73,975	1,376	145,820
<u>Non Add:</u> FY 2002 DERF/FY 2003 Cost of War Tomahawk Remanufacture					TBD	TBD	350,000	TBD	TBD	598,000

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BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)					Weapon System TOMAHAWK		A. DATE February 2002			
B. APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy BA2/Other Missiles					C. P-1 ITEM NOMENCLATURE Tomahawk (PEO(W)) (BLI: 210100)				SUBHEAD J2EL	
COST ELEMENT/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
<u>TACTOM All-Up-Round</u> 01000/FY02	32	1,111	NAVAIR	06/14/01	SS/FFP	Raytheon Missile Systems Co., Tucson, AZ	Jun 02	Apr 04	YES	N/A
01000/FY03	106	956	NAVAIR	06/14/01	SS/FFP	Raytheon Missile Systems Co., Tucson, AZ	Jan 03	Aug 04	YES	N/A
<u>TLAM REMAN</u> DERF/FY02*	TBD									
Cost of War/FY03*	TBD									

D. Remarks:
 *Non Add: FY 2002 Defense Emergency Response Funding (DERF)/FY 2003 Cost of War (COW):
 \$350 million FY 2002 DERF and \$598M FY 2003 COW funding will remanufacture up to 784 older missiles to Block III configuration. FY 2002 DERF funds awarded under Letter Contract in December 2001; definitization planned for end of February 2002. Final FY 2002 DERF/2003 COW quantity will be determined upon definitization.

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FY 2003 PRESIDENT'S BUDGET PRODUCTION SCHEDULE, P-21																DATE		February 2002									
APPROPRIATION/BUDGET ACTIVITY											Weapon System					P-1 ITEM NOMENCLATURE											
Weapons Procurement, Navy											TOMAHAWK					Tomahawk (PEO(W))(BLI: 210100)											
						Production Rate				Procurement Leadtimes																	
Item		Manufacturer's Name and Location				MSR	1-8-5	MAX	Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure													
Remanufactured Tomahawk		Raytheon Missiles Systems Co.																									
		Tucson, AZ				N/A	20	75	6	3	18		21	Each													
Tactical Tomahawk		Raytheon Missiles Systems Co.																									
		Tucson, AZ				N/A	26	42	4	4	22	19	23	Each													
Remanufactured Tomahawk II		Raytheon Missiles Systems Co.																									
		Tucson, AZ				N/A	20	35		4	12		16	Each													

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BUDGET ITEM JUSTIFICATION SHEET P-40											DATE: February 2002	
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy/BA-(2) Other Missiles							P-1 ITEM NOMENCLATURE Evolved SEASPARROW Missile (ESSM) (LI#230700)					
Program Element for Code B Items: 0604755N, Proj. 20173							Other Related Program Elements					
	Prior Years	ID Code	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Program	
QUANTITY			32	26	146	182	384	441	298	567	2,076	
COST (\$M)	\$36.9	B	\$39.4	\$41.7	\$129.6	\$150.7	\$260.5	\$282.9	\$198.1	\$426.8	\$1,566.6	
Initial Spares (\$M)												
<p>ITEM DESCRIPTION/JUSTIFICATION:</p> <p>The Evolved SEASPARROW Missile (ESSM) Program is an international cooperative effort to design, develop, test, and produce a new and improved version of the NATO SEASPARROW missile (RIM-7P) with the kinematic performance to defeat current and projected threats that possess low altitude, high velocity and maneuver characteristics beyond the engagement capabilities of the RIM-7P. The ESSM will provide an evolved kinematically improved aft-end missile section for mating, as an all up round, with the modified RIM-7P forebody guidance and warhead section. The ESSM improvement will provide the capability to counter maneuvering anti-ship missiles, expand battle space, and increase system firepower. The ESSM is designed for "quad pack" use in the MK41 Vertical Launching System.</p> <p>ESSM is a cooperative effort among ten NATO SEASPARROW nations (Australia, Canada, Denmark, Germany, Greece, Netherlands, Norway, Spain, Turkey, and the U.S.). An addendum to the NATO SEASPARROW Surface Missile System Memorandum of Understanding (MOU), covering the Engineering and Manufacturing Development (EMD) phase of the ESSM was signed in June 1995. The MOU for the cooperative production of ESSM was signed 27 December 1997. Authority to enter into Low Rate Initial Production (LRIP) was granted 07 March 2001.</p> <p>The FY 01 request will support a Low Rate Initial Production buy of 32 missiles and the U.S. share of support as defined in the MOU. The FY-02 request will support the procurement of 26 missiles plus associated production support (U.S. share) in accordance with the MOU. Additionally, the U.S. is required to pay its share of non-recurring investment for performance characterization studies. The FY-03 request will support the procurement of 146 missiles and the U.S. share of associated production support.</p> <p>ESSM RDT&E funding is included in program element 0604755N, Project 20173 and the program element 0604756N, Project 20173.</p>												

CLASSIFICATION: UNCLASSIFIED

WEAPONS PROCUREMENT, NAVY
FY 2003 PRESIDENT'S BUDGET
MISSILE COST ANALYSIS
EXHIBIT P-5
(Dollars in Millions)

Missile Nomenclature & Popular Name: Evolved SEASPARROW Missile (ESSM) (LI#230700)									DATE: Feb-02					
Cost Codes	Cost Elements	Prior Years Total Cost	FY 2001			FY 2002			FY 2003					
			Quantity	Quantity Unit Cost	Total Cost	Quantity	Quantity Unit Cost	Total Cost	Quantity	Quantity Unit Cost	Total Cost			
ES001	Missile Hardware													
	All Up Round		32	655	20,953	26	613	15,930	146	558	81,444			
	AEGIS S-Band Uplink/Downlink		32	89	2,848	26	89	2,314	146	89	12,994			
	Warhead Compatible Telemeter		20	56	1,120	12	56	672	20	56	1,120			
	MK 25 Quadpack Canisters		9	272	2,448	7	284	1,988	37	274	10,138			
	Total Hardware				27,369			20,904			105,696			
ES830	Procurement Support													
	Tooling and Test Equipment	17,486												
	Performance Characterization Non-recurring							6,000						
	MOU Average Unit Cost Adjustment										8,458			
	Production Engineering	19,343			12,066			14,761			15,396			
	Total Procurement Support	36,829			12,066			20,761			23,854			
	Total Flyaway Cost	36,829			39,435			41,665			129,550			
ES002	Fleet Support													
	Total Fleet Support													
	Weapon System Cost	36,829			39,435			41,665			129,550			
	Total Program Cost	36,829			39,435			41,665			129,550			

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BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)					Weapon System		A. DATE February 2002			
B. APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy/BA-(2) Other Missiles					C. P-1 ITEM NOMENCLATURE Evolved SEASPARROW Missile (ESSM) (LI#230700)				SUBHEAD 22ES	
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
FISCAL YEAR - 2001										
All Up Round	32	655	NAVSEA	June 1999	SS/FPI Option	Raytheon Systems Co., Tucson, AZ	Aug 01	Apr 03	Yes	Mar 00
AEGIS S-Band	32	89	NAVSEA	June 1999	SS/FPI Option	Raytheon Systems Co., Tucson, AZ	Aug 01	Apr 03	Yes	Mar 00
Warhead Compatable Telemeter	20	56	NAVSEA	June 1999	SS/FPI Option	Raytheon Systems Co., Tucson, AZ	Aug 01	Apr 03	Yes	Mar 00
MK 25 Canister	9	272	NAVSEA		SS/Option	United Defense, Minneapolis, /MN	Feb 01	Sep 02	Yes	
FISCAL YEAR - 2002										
All Up Round	26	613	NAVSEA	Oct 2001	SS/FPI Option	Raytheon Systems Co., Tucson, AZ	Apr 02	Apr 04	Yes	Mar 00
AEGIS S-Band	26	89	NAVSEA	Oct 2001	SS/FPI Option	Raytheon Systems Co., Tucson, AZ	Apr 02	Apr 04	Yes	Mar 00
Warhead Compatable Telemeter	12	56	NAVSEA	Oct 2001	SS/FPI Option	Raytheon Systems Co., Tucson, AZ	Apr 02	Apr 04	Yes	Mar 00
MK 25 Canister	7	284	NAVSEA		SS/Option	United Defense, Minneapolis, /MN	Feb 02	Sep 03	Yes	
FISCAL YEAR - 2003										
All Up Round	146	558	NAVSEA	Oct 2001	SS/FPI Option	Raytheon Systems Co., Tucson, AZ	Apr 03	Apr 05	Yes	Mar 00
AEGIS S-Band	146	89	NAVSEA	Oct 2001	SS/FPI Option	Raytheon Systems Co., Tucson, AZ	Apr 03	Apr 05	Yes	Mar 00
Warhead Compatable Telemeter	20	56	NAVSEA	Feb 2002	SS/FPI Option	Raytheon Systems Co., Tucson, AZ	Apr 03	Apr 05	Yes	Mar 00
MK 25 Canister	37	274	NAVSEA		SS/Option	United Defense, Minneapolis, /MN	Feb 03	Sep 04	Yes	
D. REMARKS										
Missiles/Canister Requirements for the U.S. are placed on contract with International Partners to achieve the best economical Price.										

FY 2002 BUDGET PRODUCTION SCHEDULE, P-21						DATE		February 2002									
APPROPRIATION/BUDGET ACTIVITY						Weapon System		P-1 ITEM NOMENCLATURE									
Weapons Procurement, Navy/BA-(2) Other Missiles								Evolved SEASPARROW Missile									
						Production Rate			Procurement Leadtimes								
Item	Manufacturer's Name and Location					MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure			
EVOLVED SEASPARROW MISSILE	RMSC, Tucson, AZ					120	300	576	6	6	24	24	36	E			
MK 25 CANISTER	United Defense, Minneapolis					120	330	480	3	4	24	20	27	E			

ITEM / MANUFACTURER	F Y	S V C	Q T Y	D E L	B A L	FISCAL YEAR 2001												FISCAL YEAR 2002												B A L
						2000			CALENDAR YEAR 2001									CALENDAR YEAR 2002												
						O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
EVOLVED SEASPARROW MISSILE	01	N	32		32																									32
MK 25 CANISTER	01	N	9		9						A																	2	7	
EVOLVED SEASPARROW MISSILE	02	N	26		26																									26
MK 25 CANISTER	02	N	7		7															A										7

ITEM / MANUFACTURER	F Y	S V C	Q T Y	D E L	B A L	FISCAL YEAR 2003												FISCAL YEAR 2004												B A L
						2002			CALENDAR YEAR 2003									CALENDAR YEAR 2004												
						O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
EVOLVED SEASPARROW MISSILE	01	N	32	0	32								4	4	4	4	4	4	4	4										0
MK 25 CANISTER	01	N	9	2	7	2	2	3																						0
EVOLVED SEASPARROW MISSILE	02	N	26	0	26																									2
MK 25 CANISTER	02	N	7	0	7											2	2	2	1						4	4	4	4	4	0
EVOLVED SEASPARROW MISSILE	03	N	146	0	146							A																		146
MK 25 CANISTER	03	N	37	0	37						A																	4	33	

Remarks:

FY 2002 BUDGET PRODUCTION SCHEDULE, P-21						DATE February 2002																									
APPROPRIATION/BUDGET ACTIVITY						Weapon System						P-1 ITEM NOMENCLATURE																			
Weapons Procurement, Navy/BA-(2) Other Missiles												Evolved SEASPARROW Missile																			
						Production Rate			Procurement Leadtimes																						
Item	Manufacturer's Name and Location					MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure																	
EVOLVED SEASPARROW MISSILE	RMSC, Tucson, AZ					120	300	576	6	6	24	24	36	E																	
MK 25 CANISTER	United Defense, Minneapolis					120	330	480	3	4	20	20	27	E																	
ITEM / MANUFACTURER		F Y	S V C	Q T Y	D E L	B A L	FISCAL YEAR 2005												FISCAL YEAR 2006												B A L
							2004			CALENDAR YEAR 2005									CALENDAR YEAR 2006												
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
EVOLVED SEASPARROW MISSILE		02	N	26	24	2	2																					0			
MK 25 CANISTER		02	N	7	7	0																						0			
EVOLVED SEASPARROW MISSILE		03	N	146	0	146																						0			
MK 25 CANISTER		03	N	37	4	33	4	4	4	4	4	4	4	5	12	12	12	12	12	12	12	12	14					0			
EVOLVED SEASPARROW MISSILE		04	N	182	0	182																						96			
MK 25 CANISTER		04	N	47	0	47										4	4	4	4	4	4	4	4	4	4	3		0			
EVOLVED SEASPARROW MISSILE		05	N	384	0	384																						384			
MK 25 CANISTER		05	N	100	0	100					A															8	92				
EVOLVED SEASPARROW MISSILE		06	N	441	0	441																						441			
MK 25 CANISTER		06	N	115	0	115													A									115			
ITEM / MANUFACTURER		F Y	S V C	Q T Y	D E L	B A L	FISCAL YEAR 2007												FISCAL YEAR 2008												B A L
							2006			CALENDAR YEAR 2007									CALENDAR YEAR 2008												
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
EVOLVED SEASPARROW MISSILE		04	N	182	86	96	16	16	16	16	16	16																	0		
MK 25 CANISTER		04	N	47	47	0																						0			
EVOLVED SEASPARROW MISSILE		05	N	384	0	384																						0			
MK 25 CANISTER		05	N	100	8	92	8	8	8	8	8	8	8	9	32	32	32	32	32	32	32	32	32					0			
EVOLVED SEASPARROW MISSILE		06	N	441	0	441																						225			
MK 25 CANISTER		06	N	115	0	115										9	9	9	9	9	10	10	10	10	10	10		0			
EVOLVED SEASPARROW MISSILE		07	N	298	0	298																						298			
MK 25 CANISTER		07	N	78	0	78					A														8		70				
Remarks:																															

CLASSIFICATION:

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Exhibit P-20, Requirements Study			APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy/BA-(2) Other Missiles				DATE: February 2002	
P-1 ITEM NOMENCLATURE Evolved SEASPARROW Missile (ESSM) (LI#230700)			Admin Leadtime (after Oct1): 6 Months			Prod Leadtime : 24 months		
	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	
Buy Summary	32	26	146	182	384	441	298	
Unit Cost (\$K)	1232.3	1602.5	887.3	828.0	678.3	641.6	664.7	
Total Cost (\$K)	\$39,435.0	\$41,665.0	\$129,550.0	\$150,697.0	\$260,483.0	\$282,944.0	\$198,077.0	
Asset Dynamics								
Beginning Asset Position	0	0	0	4	24	78	210	
Deliveries from all prior year funding								
Deliveries from FY 2000 funding								
Deliveries from FY 2001 funding			24	8				
Deliveries from FY 2002 funding				24	2			
Deliveries from subsequent years' funding					72	160	288	
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage			-20	-12	-20	-28	-26	
Other Losses/Usage								
Disposals/Retirements/Attritions/etc.								
End of Year Asset Position	0	0	4	24	78	210	472	
Inventory Objective or Current Authorized Allowance								
Inventory Objective	Actual Training Expenditures	Other than Trai Usage	Disposals (Vehicles/Other)	Vehicles Eligible for FY 2001 Replacement: N/A		Aircraft: TOAI: N/A		
Assets Rqd For Combat Loads:	FY 2000 thru	FY 2000 thru	FY 2000 thru	Vehicles Eligible for FY 2002 Replacement: N/A		PAA: TAI N/A		
WRM Rqmt:	FY 1999: 0	FY 1999:	FY 1999: 0	Vehicle Augment: N/A		Attrition Res: N/A		
Pipeline:	FY 1998: 0	FY 1998:	FY 1998: 0			BAI N/A		
Other:	FY 1997: 0	FY 1997:	FY 1997: 0			Inactive Inv: N/A		
TOTAL:						Storage: N/A		
Remarks:								

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BUDGET ITEM JUSTIFICATION SHEET P-40										DATE: Feb 2002	
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy/BA 2 Other Missiles						P-1 ITEM NOMENCLATURE AMRAAM					
Program Element for Code B Items:						Other Related Program Elements					
	Prior Years	ID Code	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Program
QUANTITY	1,474		63	57	100	55	48	48	48	526	2,419
COST (\$M)	\$1,057.5		\$37.6	\$36.7	\$50.9	\$35.9	\$34.3	\$35.3	\$36.2	\$220.9	\$1,545.3
Initial Spares (\$M)	\$25.1		\$0.3	\$0.4	\$0.4	\$0.4	\$0.4	\$0.4	\$0.4	\$1.4	\$29.1
Total (\$M)	\$1,082.6		\$37.8	\$37.1	\$51.3	\$36.3	\$34.7	\$35.7	\$36.6	\$222.3	\$1,574.4
Unit Cost (\$M)	\$0.734		\$0.600	\$0.651	\$0.513	\$0.659	\$0.723	\$0.744	\$0.762	\$0.423	\$0.651
<p>MISSION AND DESCRIPTION:</p> <p>The Advanced Medium Range Air-to-Air Missile (AMRAAM) is the next generation all-weather, all-environment radar guided missile developed by the Air Force and Navy . AMRAAM is smaller, faster, lighter, and has improved capabilities against very low-altitude and high-altitude targets in an electronic countermeasure environment. AMRAAM incorporates an active radar in conjunction with an inertial reference unit and microcomputer system which makes the missile less dependent upon the aircraft fire control system. This advanced capability enables the pilot to aim and fire several missiles at multiple targets.</p> <p>FY2003 PROGRAM JUSTIFICATION:</p> <p>100 missiles will be procured in FY 2003 along with non-recurring support costs such as; government field activity technical, test, and logistics support, procurement of test articles, test equipment to support the AIM-120C configuration, and procurement of peculiar support equipment.</p>											

Columns may not add due to rounding.

P-1 SHOPPING LIST

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DD Form 2454, JUN 86

ITEM NO

6

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**WEAPONS PROCUREMENT, NAVY
FY 2003 PRESIDENT'S BUDGET SUBMISSION
MISSILE COST ANALYSIS
EXHIBIT P-5
(Dollars in Millions)**

Missile Nomenclature & Popular Name: **AMRAAM**

Date: **Feb 2002**

<u>Cost Elements</u>	<u>Prior Years Total Cost</u>	<u>FY 2001 Quantity</u>	<u>Quantity Unit Cost</u>	<u>63 Total Cost</u>	<u>FY 2002 Quantity</u>	<u>Quantity Unit Cost</u>	<u>57 Total Cost</u>	<u>FY 2003 Quantity</u>	<u>Quantity Unit Cost</u>	<u>100 Total Cost</u>
<u>Missile Hardware</u>										
Guidance & Control	613.035	63	0.354	22.291	57	0.308	17.545	100	0.305	30.510
Propulsion	54.492	63	0.031	1.981	57	0.027	1.560	100	0.027	2.712
Warhead	13.623	63	0.008	0.495	57	0.007	0.390	100	0.007	0.678
ECO	20.309			0.578			0.877			0.616
ST&TE	40.120			0.000			4.400			0.900
Production Tech Support	153.921			6.587			4.335			5.341
Containers	2.230			0.000			0.000			0.000
Production Test	54.511			2.495			3.437			5.555
Total Flyaway Cost	952.240	63	0.546	34.427	57	0.571	32.544	100	0.463	46.312
<u>Fleet Support</u>										
Test Equipment	57.060			0.665			0.886			1.890
Handling Equipment	0.795			0.000			0.000			0.000
Training Equipment	4.213			0.064			0.274			0.164
ILS	41.046			2.328			2.894			2.446
Data & Pubs	2.134			0.108			0.119			0.125
Total Fleet Support	105.248			3.165			4.173			4.625
Weapon System Cost	1,057.488	63	0.597	37.592	57	0.644	36.717	100	0.509	50.937
Modifications										
Initial Spares	25.072			0.279			0.358			0.375
Total Program Cost	1,082.560	63	0.601	37.871	57	0.650	37.075	100	0.513	51.312

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BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)					Weapon System AMRAAM		A. DATE Feb 2002			
B. APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy / BA 2 Other Missiles					C. P-1 ITEM NOMENCLATURE AMRAAM				SUBHEAD Y2GB	
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	TECHNICAL DATA PACKAGES AVAILABLE NOW	IF NO WHEN AVAILABLE
FY 2001	63	402	Eglin AFB, FI	10-1-00	SS/FP	Lot XV Raytheon Missile Systems Company, Tucson AZ	4/30/01	08/02	YES	
FY 2002	57	357	Eglin AFB, FI	10-1-01	SS/FP	Lot XVI CONTRACTOR	3/31/02	09/03	YES	
FY 2003	100	345	Eglin AFB, FI	10-1-02	SS/FP	Lot XVII CONTRACTOR	3/31/03	09/04	YES	
D. REMARKS										

FY 2003 BUDGET PRODUCTION SCHEDULE, P-21														DATE		Feb 2002															
APPROPRIATION/BUDGET ACTIVITY														Weapon System		P-1 ITEM NOMENCLATURE															
Weapons Procurement, Navy/BA 2 Other Missiles														AMRAAM		AMRAAM															
		Production Rate				Procurement Lead-times																									
Item	Manufacturer's Name and Location					MSR	1-8-5	MAX	ALT Prior to Oct 1		ALT After Oct 1		Initial Mfg PLT		Reorder Mfg PLT		Total	Unit of Measure													
AMRAAM	Raytheon					450	960	1200	0		6		21		18		24	M													
ITEM / MANUFACTURER		F Y	S V C	Q T Y	D E L	B A L	FISCAL YEAR 2002												FISCAL YEAR 2003												B A L
							2001			CALENDAR YEAR 2002										CALENDAR YEAR 2003											
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
AMRAAM FY 2000 (Lot 14)				535	133	402																									
Raytheon Systems Co.		00	AF	163	0	163			37	42	30	29	12	13																	0
Raytheon Systems Co.		00	N	91	0	91			24	24	21	10	12																		0
Raytheon Systems Co.		00	FMS	281	133	148	4	1	1	9	12	18	18	13	35	37															0
AMRAAM FY 2001 (Lot 15)				582	0	582																									
Raytheon Systems Co.		01	AF	170	0	170											16	16	16	16	12	12	16	16	16	20	14			0	
Raytheon Systems Co.		01	N	63	0	63												8	4	8	4	8	4	4	4	8	11			0	
Raytheon Systems Co.		01	FMS	349	0	349								2			28	21	26	22	20	24	24	24	24	18	20	48	48	0	
ITEM / MANUFACTURER		F Y	S V C	Q T Y	D E L	B A L	FISCAL YEAR 2003												FISCAL YEAR 2004												B A L
							2002			CALENDAR YEAR 2003										CALENDAR YEAR 2004											
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
AMRAAM FY 2002 (Lot 16)				847	0	847																									
Raytheon Systems Co.		02	AF	190	0	190																								0	
Raytheon Systems Co.		02	N	57	0	57																								0	
Raytheon Systems Co.		02	FMS	600	0	600																								0	
										</																					

CLASSIFICATION:

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BUDGET ITEM JUSTIFICATION SHEET P-40											DATE: February 2002	
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy/BA-2 Other Missiles								P-1 ITEM NOMENCLATURE AIM-9X Sidewinder				
Program Element for Code B Items:								Other Related Program Elements 0207161N				
	Prior Years	ID Code		FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Program*
QUANTITY		B		0	105	295	142	148	151	153	3943	4937
COST (\$M)				0	\$24.205	\$53.250	\$30.893	\$33.479	\$34.739	\$35.988	\$942.336	\$1,154.890
Initial Spares (\$M)				0	\$0.973	\$0.996	\$0.862	\$1.044	\$0.924	\$1.032	\$0.000	\$5.831
Total (\$M)				0	\$25.178	\$54.246	\$31.755	\$34.523	\$35.663	\$37.020	\$942.336	\$1,160.721
Unit Cost (\$M)				0	\$0.240	\$0.184	\$0.224	\$0.233	\$0.236	\$0.242		\$0.235
<p>The AIM-9X (Sidewinder) short range air-to-air missile is a long-term evolution of the AIM-9 series of fielded missiles. The AIM-9X missile program provides a launch and leave, air combat munition that uses passive infrared (IR) energy for acquisition and tracking of enemy aircraft and complements the Advanced Medium Range Air-to-Air Missile. Air superiority in the short-range air-to-air missile arena is essential and includes first shot, first kill opportunity against an enemy employing IR countermeasures. The AIM-9X employs several components common with the AIM-9M. Anti-Tamper features are being incorporated to protect improvements inherent in this design.</p> <p>FY 2002 Program Justification: Lot 2 LRIP option was partially executed in Nov 2001. FY 2003 Program Justification: Lot 3 LRIP option to be executed in FY03.</p> <p>The total quantity of missiles produced will be a combination of All up Rounds (AUR) and Captive Air Training Missiles (CATM). FY01 is presented in the P3A exhibit for WPN Mods. Total Program does not include 63 units which are presented in the P3A of the AIM 9 Sidewinder Mods budget (BLI 231500).</p>												

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<u>Cost Elements</u>	<u>Prior Years</u> <u>Total Cost</u>	<u>FY 2002</u> <u>Quantity</u>	<u>Quantity</u> <u>Unit Cost</u>	<u>105</u> <u>Total Cost</u>	<u>FY 2003</u> <u>Quantity</u>	<u>Quantity</u> <u>Unit Cost</u>	<u>295</u> <u>Total Cost</u>
Missile Hardware							
All Up Round		60	0.187	11.218	239	0.160	38.152
Captive Air Training Missile		45	0.151	6.779	56	0.141	7.896
Missile containers				0.244			0.647
Engineering Change Orders (ECO)				0.792			0.832
Special Test/Special Tooling Equipment				0.102			0.104
Non-Recurring							
Government SE/PM				1.934			2.145
Total Flyaway Cost		105	0.201	21.069	295	0.169	49.776
Fleet Support Cost							
Support Equipment				0.688			1.331
Training							
Training Support				0.326			0.312
Training Equipment							
DATM				0.427			0.185
PEST							
CEST							
Airborne Test Equipment (ATE)				0.000			0.367
Data				0.046			0.067
Production Tech Support				1.649			1.212
Total Fleet Support *				3.136			3.474
Prior Year Cost							
Weapons System Cost **		105	0.231	24.205	295	0.181	53.250
Other Procurement Costs							
Initial Spares				0.973			0.996
Total Program Cost				25.178			54.246

*Higher total fleet support cost in FY02/03 based on user's training requirements and initial fielding of missile.

**Fluctuations in unit cost caused by contractual agreement to begin buying all seekers in FY04 and changes in joint quantities.

CLASSIFICATION: UNCLASSIFIED

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)					Weapon System		A. DATE		February 2002	
B. APPROPRIATION/BUDGET ACTIVITY					C. P-1 ITEM NOMENCLATURE				SUBHEAD Y2ER	
Weapons Procurement, Navy					AIM-9X Sidewinder					
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
FY02 AIM-9X LRIP 2 See Note 1	105	0.174	NAVAIR	May-96	Competitive-FPI	Raytheon System Co. Tucson, AZ	Nov 01	Aug-03	Yes	
FY03 AIM-9X LRIP 3 See Note 1	295	0.158	NAVAIR	May-96	Competitive-FPI	Raytheon System Co. Tucson, AZ	Nov 02	May 04	Yes	
D. REMARKS										
Note:										
1. Unit cost calculation assumes US Air Force procurement of 138 (102 AUR, 36 CATM) missiles in FY02 and 286 (204 AUR, 82 CATM) in FY 03. Unit Cost consists of AUR, CATM and container.										

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CLASSIFICATION:

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Date: February 2002

BUDGET ITEM JUSTIFICATION SHEET
P-40

APPROPRIATION/BUDGET ACTIVITY

Weapons Procurement, Navy/BA-2 Other Missiles

P-1 ITEM NOMENCLATURE

Joint Standoff Weapon (JSOW)**(J2JS)**

Program Element for Code B Items:

Code B - P.E. 0604727N

Other Related Program Elements

0604727F, 27324F

	Prior Years	ID Code	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Program
QUANTITY	1,017	B	29	0	363	555	522	502	424	9,588	13,000
COST (\$M)	\$399.38		\$161.31	\$0.00	\$139.54	\$188.91	\$167.20	\$166.68	\$149.83	\$2,697.49	4,070.33
Initial Spares (\$M)	\$0.41		\$0.27	\$0.06	\$0.05	\$0.08	\$0.08	\$0.05	\$0.13	\$0.00	\$1.11
Total (\$M)	\$399.79		\$161.58	\$0.06	\$139.59	\$188.98	\$167.28	\$166.73	\$149.95	\$2,697.49	4,071.44
Unit Cost (\$M)	0.393		5.572	0.000	0.385	0.341	0.320	0.332	0.354	0.281	0.313

Joint Standoff Weapons (JSOW) is a joint USN/USAF program; USN is lead service. JSOW is an air-to-ground glide weapon capable of attacking a variety of targets during day, night, and adverse weather conditions for use against fixed area targets. The JSOW will enhance aircraft survivability by providing the capability for launch aircraft to standoff outside the range of most target area surface-to-air threat systems. The JSOW Global Positioning System/Inertial Navigation System will allow several target kills per aircraft sortie. The Joint Mission Planning System (FY00-03) provides a common USN/USAF mission planning system. The JSOW-A will be integrated on USN and USAF aircraft, with a Joint planned inventory of 11,800 units. USN will procure an inventory of 8,800 All-Up-Rounds (AURs) for integration on F/A-18 aircraft, and the USAF will procure 3,000 AURs for integration on F-16C/D, F-15E, B-1B, B-52 and B-2 aircraft. JSOW-A completed EMD testing, including initial Operational Test, with an exceptional test success rate of 91.3% (52 of 57). JSOW-A full Operational Testing (OPEVAL) was completed in July 1997. The JSOW-B will be integrated on USN and USAF aircraft with a joint (USAF/USN) inventory of 4,314. USN will procure an inventory of 1,200 AURs, and the USAF will procure an inventory of 3,114 AURs. JSOW-B Developmental Testing is completed. Multi-Operational Test & Evaluation will commence in FY03 following completion of an 18-month control section ECP effort. The Navy will procure 3000 JSOW-C Unitary AURs, which will incorporate the UK Broach warhead, beginning in FY03. JSOW-A commenced Full Rate Production (FRP) in FY 99 and the JSOW-B commenced Low Rate Initial Production (LRIP) in FY01.

Missile Nomenclature & Popular Name: Joint Standoff Weapons (JSOW)
AGM-154

Date: February 2002

<u>Cost Elements</u>	<u>Prior Years</u> <u>Total Cost</u>	<u>FY 2001</u> <u>Quantity</u>	<u>Quantity</u> <u>Unit Cost</u>	<u>Total Cost</u>	<u>FY 2002</u> <u>Quantity</u>	<u>Quantity</u> <u>Unit Cost</u>	<u>Total Cost</u>	<u>FY 2003</u> <u>Quantity</u>	<u>Quantity</u> <u>Unit Cost</u>	<u>Total Cost</u>	<u>To</u> <u>Complete</u> <u>Costs</u>	<u>Total Cost</u>
<u>Missile Hardware</u>												
All Up Round (AUR)	164.070		0.973	28.221	-		0.000		0.300	108.881	2,940.166	3,241.338
Contractor (Warranty/ECO/Data)	13.592			64.596			0.000			7.204	191.297	276.689
Total Hardware	266.982	29	3.201	92.816	0 -		0.000	363	0.320	116.085	3,047.927	3,523.810
<u>Procurement Support</u>												
LC GEU/Control	11.233			0.000			0.000			0.000	11.233	11.233
JMPS INTEGRATION	0.217			4.137			0.000			0.700	0.000	5.055
Gov't In-house/Prod Supt	26.348			21.962			0.000			7.385	56.298	111.993
Special Tools and Test Equip	59.005			16.023			0.000			7.570	67.408	150.006
Containers	13.455			0.533			0.000			4.061	138.383	156.432
Telemetry	5.561			7.848			0.000			2.730	38.526	54.665
Command & Launch/ST&E/Mission/SW	5.574			14.440			0.000			0.519	11.705	32.239
Total Procurement Support	121.393			64.944			0.000			22.966	312.319	521.622
Total Flyaway Cost	388.375	29	5.440	157.760	0 -		0.000	363	0.383	139.051	3,360.247	4,045.433
<u>Fleet Support</u>												
ILS/Support	8.702			3.547			0.000			0.487	9.860	22.596
Total Fleet Support	8.702			3.547			0.000			0.487	9.860	22.596
Weapons System Cost	397.077	29	5.562	161.307	0 -		0.000	363	0.384	139.537	3,370.107	4,068.028
LRIP-2 Acceleration	2.300										0.000	2.300
Net P-1 Cost	399.377			161.307			0.000			139.537	3,370.107	4,070.328
Modifications												
Initial Spares	0.409			0.272			0.055			0.048	0.329	1.113
Total Program Cost	399.786	29	5.572	161.579	0 -		0.000	363	0.385	139.591	3,370.411	4,071.367

Missile Nomenclature & Popular Name: Joint Standoff Weapons (JSOW)
AGM-154A

Date: February 2002

	Prior Years	FY 2001	Quantity		FY 2002	Quantity		FY 2003	Quantity		To	
Cost Elements	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Complete	Total Cost
Missile Hardware												
All Up Round (AUR)	253.390	-		0.000	-		0.000		0.242	46.282	1,579.627	1,879.299
Contractor (Warranty/ECO/Data)	13.592			64.369			0.000			5.582	136.324	219.867
Total Hardware	266.982	00 -		64.369	0 -		0.000	191	0.272	51.864	1,715.952	2,099.167
Procurement Support												
LC GEU/Control	11.233			0.000			0.000			0.000	0.000	11.233
JMPS INTEGRATION	0.217			4.137			0.000			0.700	0.000	5.055
Gov't In-house/Prod Supt	26.348			21.811			0.000			7.133	31.735	108.760
Special Tools and Test Equip	55.105			10.543			0.000			3.528	40.555	109.731
Containers	13.455			0.000			0.000			1.921	88.538	103.914
Telemetry	5.561			7.848			0.000			2.730	38.526	54.665
Command & Launch/ST&E/Mssion/SW	5.274			14.440			0.000			0.519	11.706	31.939
Total Procurement Support	117.193			58.780			0.000			16.531	232.792	425.296
Total Flyaway Cost	384.175	0.000 -		123.148	0 -		0.000	191.000	0.358	68.395	1,948.745	2,524.463
Fleet Support												
ILS/Support	8.702			3.547			0.000			0.288	6.787	19.324
Total Fleet Support	8.702			3.547			0.000			0.288	6.787	19.324
Weapons System Cost	392.877	00 -		126.695	0 -		0.000	191	0.360	68.683	1,955.531	2,543.786
LRIP-2 Acceleration	2.300										0.000	2.300
Net P-1 Cost	395.177			126.695			0.000			68.683	1,955.531	2,546.086
Modifications												
Initial Spares	0.409			0.272			0.055			0.048	0.329	1.113
Total Program Cost	395.586	00 -		126.967	0 -		0.055	191	0.360	68.731	1,714.760	2,306.099

Missile Nomenclature & Popular Name: Joint Standoff Weapons (JSOW)
AGM-154B

Date: February 2002

	Prior Years	FY 2001	Quantity		FY 2002	Quantity		FY 2003	Quantity		To	
<u>Cost Elements</u>	<u>Total Cost</u>	<u>Quantity</u>	<u>Unit Cost</u>	<u>Total Cost</u>	<u>Quantity</u>	<u>Unit Cost</u>	<u>Total Cost</u>	<u>Quantity</u>	<u>Unit Cost</u>	<u>Total Cost</u>	<u>Complete</u>	<u>Total Cost</u>
<u>Missile Hardware</u>												
All Up Round (AUR)	0.000		0.648	28.221	-		0.000		0.494	33.858	460.714	522.793
Contractor (Warranty/ECO/Data)	0.000			0.227			0.000			0.548	15.249	16.024
Total Hardware	0.000	29	0.981	28.448	0 -		0.000	97	0.355	34.406	475.965	538.818
<u>Procurement Support</u>												
LC GEU/Control												
JMPS INTEGRATION												
Gov't In-house/Prod Supt	0.000			0.151			0.000			0.000	0.000	0.151
Special Tools and Test Equip	3.900			1.236			0.000			0.506	3.157	8.799
Containers	0.000			0.533			0.000			1.214	17.843	19.590
Telemetry	0.000			0.000			0.000			0.000	0.000	0.000
Command & Launch/ST&E/Mssion/SW	0.300			0.000			0.000			0.000	0.000	0.300
Total Procurement Support	4.200			1.920			0.000			1.720	21.000	28.840
											0.000	
Total Flyaway Cost	4.200	29	1.047	30.367	0 -		0.000	97	0.372	36.126	496.965	567.658
<u>Fleet Support</u>												
ILS/Support	0.000			0.000			0.000			0.198	0.982	1.180
Total Fleet Support	0.000			0.000			0.000			0.198	0.982	1.180
Weapons System Cost	4.200	29	1.047	30.367	0 -		0.000	97	0.374	36.324	497.947	568.838
LRIP-2 Acceleration												0.000
Net P-1 Cost	4.200			30.367			0.000			36.324	497.947	568.838
Modifications											0.000	0.000
Initial Spares	0.000			0.000			0.000			0.000	0.000	0.000
Total Program Cost	4.200	29	1.047	30.367	0 -		0.000	97	0.374	36.324	497.947	568.838
	Note:											

Missile Nomenclature & Popular Name: Joint Standoff Weapons (JSOW)
AGM-154C

Date: February 2002

	Prior Years	FY 2001	Quantity		FY 2002	Quantity		FY 2003	Quantity		To	
Cost Elements	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Complete Costs	Total Cost
Missile Hardware												
All Up Round (AUR)	0.000		-	0.000		-	0.000		0.383	28.740	816.288	845.028
Contractor (Warranty/ECO/Data)	0.000			0.000			0.000			1.074	39.724	40.798
Total Hardware	0.000	0 -		0.000	0 -		0.000	75	0.398	29.815	856.012	885.826
Procurement Support												
LC GEU/Control												
JMPS INTEGRATION												
Gov't In-house/Prod Supt	0.000			0.000			0.000			0.252	2.830	3.082
Special Tools and Test Equip	0.000			4.245			0.000			3.537	27.939	31.476
Containers	0.000			0.000			0.000			0.927	32.001	32.928
Telemetry	0.000			0.000			0.000			0.000	0.000	0.000
Command & Launch/ST&E/Mssion/SW	0.000			0.000			0.000			0.000	0.000	0.000
Total Procurement Support	0.000			4.245			0.000			4.715	58.526	67.486
Total Flyaway Cost	0.000	0 -		4.245	0 -		0.000	75	0.460	34.530	914.538	953.312
Fleet Support												
ILS/Support	0.000			0.000			0.000			0.000	2.092	2.092
Total Fleet Support	0.000			0.000			0.000			0.000	2.092	2.092
Weapons System Cost	0.000	0 -		4.245	0 -		0.000	75	0.460	34.530	916.630	955.404
LRIP-2 Acceleration												0.000
Net P-1 Cost	0.000			4.245			0.000			34.530	916.630	955.404
Modifications												0.000
Initial Spares	0.000			0.000			0.000			0.000	0.000	0.000
Total Program Cost	0.000	0 -		4.245	0 -		0.000	75	0.460	34.530	916.630	955.404

<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: left;">CLASSIFICATION:</div> <div style="font-size: 2em; font-weight: bold;">UNCLASSIFIED</div> </div>										
BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)						Weapon System JSOW		DATE: February 2002		
B. APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy B.A. 2-Other Missiles					C. P-1 ITEM NOMENCLATURE Joint Standoff Weapon Systems				SUBHEAD J2JS	
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
<u>Missile H/W</u> FY-00 AGM-154A	454	207	NAVAIR	Aug 99	SS/FFP	RAYTHEON SYSTEMS (Tucson, AZ)	Dec 99	Aug 01	YES	N/A
FY-01 AGM-154B	29	981	NAVAIR	Jan 02	SS/FFP	RAYTHEON SYSTEMS (Tucson, AZ)	Apr 02	Sep 03	YES	N/A
FY-03 AGM-154A	191	272	NAVAIR	Oct 02	SS/FFP	RAYTHEON SYSTEMS (Tucson, AZ)	Jan 03	Mar 04	YES	N/A
FY-03 AGM-154B	97	355	NAVAIR	Oct 02	SS/FFP	RAYTHEON SYSTEMS (Tucson, AZ)	Jan 03	Mar 04	YES	N/A
FY-03 AGM-154C	75	398	NAVAIR	Oct 02	SS/CPIF	RAYTHEON SYSTEMS	Jan 03	Mar 04	NO	N/A
D. REMARKS										

FY 2000/01 BUDGET PRODUCTION SCHEDULE, P-21														DATE February 2002																		
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy/BA-2 OTHER Missiles														Weapon System JSOW				P-1 ITEM NOMENCLATURE JOINT STANDOFF WEAPONS (JSOW)														
						Production Rate					Procurement Leadtimes																					
Item		Manufacturer's Name and Location				MSR	All variants 2-8-5*		MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure																	
Joint Standoff Weapons (JSOW)		Raytheon Company				1130	1680		1930		3	14	14	17	E																	
		Tucson, AZ																														
AGM-154A																																
ITEM / MANUFACTURER		F Y	S V C	Q T Y	D E L	B A L	FISCAL YEAR 2001										FISCAL YEAR 2002										B A L					
							2000			CALENDAR YEAR 2001							CALENDAR YEAR 2002															
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P		
JSOW/Raytheon Systems		2000	USN	454	64	390															16	16	16	16	16	16	16	16	16	16	230	
		2001	USN	0	0	0																									0	
		2002	USN	0	0	0																									0	
		2003	USN	191	0	191																									0	
		2000	USAF	74	0	74										2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	33	
		2001	USAF	0	0	0																										
		2002	USAF	29	0	29																										
		2003	USAF	22	0	22																										
ITEM / MANUFACTURER		F Y	S V C	Q T Y	D E L	B A L	FISCAL YEAR 2003										FISCAL YEAR 2004										B A L					
							2002			CALENDAR YEAR 2003							CALENDAR YEAR 2004															
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P		
JSOW/Raytheon Systems		2000	USN	454	224	230	16	16	16	16	16	16	16	16	17	17	17	17	17	17												0
		2001	USN	0	0	0																									0	
		2002	USN	0	0	0																									0	
		2003	USN	191	0	191				A													16	16	16	16	16	16	16	16	79	
		2000	USAF	74	41	33	3	3	3	3	3	3	3	3	3	3	3														0	
		2001	USAF	0	0	0																										
		2002	USAF	29	0	29														9	10	10									0	
		2003	USAF	22	0	22				A																						
Remarks:		All variants, A, B, and C, have a common truck																														
		* Assumes a 2-8-5 shift and contractor has achieved a stable running rate																														

FY 2000/01 BUDGET PRODUCTION SCHEDULE, P-21							DATE February 2002																		
APPROPRIATION/BUDGET ACTIVITY						Weapon System						P-1 ITEM NOMENCLATURE													
Weapons Procurement, Navy/BA-2 OTHER Missiles						JSOW						JOINT STANDOFF WEAPONS (JSOW)													
		Production Rate				Procurement Leadtimes																			
Item	Manufacturer's Name and Location		MSR	All Variants 2-8-5* MAX		ALT Prior to Oct 1	ALT After Oct 1		Initial Mfg PLT	Reorder Mfg PLT		Total		Unit of Measure											
Joint Standoff Weapons (JSOW)	Raytheon Company		1130	1680 1930			3		14	14		17		E											
	Tucson, AZ																								
AGM-154B																									

ITEM / MANUFACTURER	F Y	S V C	Q T Y	D E L	B A L	FISCAL YEAR 2001												FISCAL YEAR 2002												B A L
						2000			CALENDAR YEAR 2001									CALENDAR YEAR 2002												
						O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
JSOW/Raytheon Systems	2001	USN	29	0	29																							29		
	2002	USN	0	0	0																							0		
	2003	USN	97	0	97																							97		
	2001	USAF	0	0	0																									
	2002	USAF	0	0	0																									
	2003	USAF	94	0	94																							94		

ITEM / MANUFACTURER	F Y	S V C	Q T Y	D E L	B A L	FISCAL YEAR 2003												FISCAL YEAR 2004												B A L
						2002			CALENDAR YEAR 2003									CALENDAR YEAR 2004												
						O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
JSOW/Raytheon Systems	2001	USN	29	0	29																							0		
	2002	USN	0	0	0																							0		
	2003	USN	97	0	97																							41		
	2001	USAF	0	0	0																									
	2002	USAF	0	0	0																									
	2003	USAF	94	0	94																							38		

Remarks: All variants, A, B, and C, have a common truck
* Assumes a 2-8-5 shift and contractor has achieved a stable running rate

FY 2000/01 BUDGET PRODUCTION SCHEDULE, P-21										DATE February 2002	
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy/BA-2 OTHER Missiles					Weapon System JSOW		P-1 ITEM NOMENCLATURE JOINT STANDOFF WEAPONS (JSOW)				
		Production Rate			Procurement Leadtimes						
Item	Manufacturer's Name and Location	MSR	All variants 2-8-5*	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure	
Joint Standoff Weapons (JSOW)	Raytheon Company	1130	1680	1930		3	14	14	15	E	
	Tucson, AZ										
AGM-154C											

ITEM / MANUFACTURER	F Y	S V C	Q T Y	D E L	B A L	FISCAL YEAR 2001												FISCAL YEAR 2002												B A L							
						2000			CALENDAR YEAR 2001									CALENDAR YEAR 2002																			
						O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P								
JSOW/Raytheon Systems	2003	USN	75	0	75																																

ITEM / MANUFACTURER	F Y	S V C	Q T Y	D E L	B A L	FISCAL YEAR 2003												FISCAL YEAR 2004												B A L							
						2002			CALENDAR YEAR 2003									CALENDAR YEAR 2004																			
						O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P								
	2003	USN	75	0	75				A																												

Remarks: All variants, A, B, and C, have a common truck
 * Assumes a 2-8-5 shift and contractor has achieved a stable running rate

CLASSIFICATION:

BUDGET ITEM JUSTIFICATION SHEET										DATE:	
P-40										February 2002	
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy/BA2-Other Missiles				P-1 ITEM NOMENCLATURE SLAM-ER (J2SL) (PEO-W) (BLI: 223100)							
Program Element for Code B Items: N/A				Other Related Program Elements 0604603N							
	Prior Years	ID Code	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Program
QUANTITY	241		30	30	120	84	90			0	595
COST (\$M)	\$171.1		\$23.8	\$26.0	\$83.8	\$55.9	\$63.2			\$0.0	\$423.8
MISSION AND DESCRIPTION: The SLAM-Expanded Response (SLAM ER) missile modification program provides funds for Engineering Change Proposals (ECPs) and other improvements to the SLAM weapons components which are already in the inventory and require retrofit activity to produce the SLAM ER missile. Additionally, exercise sections are procured to meet fleet training requirements. The SLAM ER missile with the addition of Automatic Target Acquisition (ATA), Automated Mission Planning, Real Time Target Capability, Increased Range and Flight Envelope and Increased Warhead Penetration and Video Imagery Datalink obsolescence update has matured into a permanent Standoff Outside Area Defense (SOAD) weapon.											

CLASSIFICATION:**UNCLASSIFIED**

CLASSIFICATION: **UNCLASSIFIED**

P3A

INDIVIDUAL MODIFICATION

February 2002

MODELS OF SYSTEM AFFECTED: AGM-84E

TYPE MODIFICATION: _____

MODIFICATION TITLE: SLAM EXPANDED RESPONSE (ER)

DESCRIPTION/JUSTIFICATION:

Converts SLAM to SLAM ER configuration, increasing range, accuracy, lethality, and enhances inter-service compatibility.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	<u>FY 2000 & Prior</u>		<u>FY 2001</u>		<u>FY 2002</u>		<u>FY 2003</u>		<u>FY 2004</u>		<u>FY 2005</u>		<u>FY 2006</u>		<u>FY 2007</u>		<u>TC</u>	<u>TOTAL</u>
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
FINANCIAL PLAN (IN MILLIONS)																		
RD&E		2.8		6.3		17.0		12.1										
INSTALLATION KITS (1)(2)(3)	241	133.8	30	16.1	30	18.5	120	57.4										
				0.537		0.617		0.479										
INSTALLATION KITS NONRECURRING								11.1										
EQUIPMENT		4.0		2.0		0.0		0.0										
SOFTWARE MAINTENANCE																		
ENGINEERING CHANGE ORDERS		3.8		0.7		0.6		0.2										
DATA		2.4		0.0		0.0		0.0										
TRAINING EQUIPMENT (Exercise Sections)	25	2.7	3	0.4	6	0.9	25	3.3										
SUPPORT EQUIPMENT (Containers)	305	2.6	30	0.3	30	0.4	120	1.5										
PCM TRAYS		0.2		0.2		0.2		0.8										
OTHER (Field Activity Support) (4)		16.9		4.0		5.4		9.5										
INTERIM CONTRACTOR SUPPORT		0.4		0.0		0.0		0.0										
INSTALL COST																		
SAASM INTEGRATION/INSTALL		0.0		0.0		0.0		0.0										
ATA RETROFIT	125	4.3	0	0.0	0	0.0	0	0.0										
TOTAL PROCUREMENT	241	171.1	30	23.8	30	26.0	120	83.8										

ITEM 09

PAGE 2

CLASSIFICATION: UNCLASSIFIED

Note(s):

- (1) Kit consists of GFE SLAM AUR, and GFE components.
- (2) Installations cost are included in the installation kits line since kit cost and installation are non-severable
- (3) Estimates cost for installation kits/installation of hardware is effected by concurrent FMS production (HARPOON). FMS assumptions include 100 units.
- (4) Warhead cost included OTHER (Field Activity Support)

CLASSIFICATION: **UNCLASSIFIED** **February 2002**

P3A (Continued) **INDIVIDUAL MODIFICATION (Continued)**

MODELS OF SYSTEMS AFFECTED: **AGM-84E** MODIFICATION TITLE: SLAM EXPANDED RESPONSE (ER)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: _____

ADMINISTRATIVE LEADTIME: 3 Months

PRODUCTION LEADTIME: 12 Months

CONTRACT DATES: FY 2001: **Feb-01**

FY 2002: **Feb-02**

FY 2003: **Dec-02**

DELIVERY DATE: FY 2001: **Jan-02**

FY 2002: **Jan-03**

FY 2003: **Jan-04**

(\$ in Millions)

Cost:	Prior Years		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		To Complete	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
PRIOR YEARS																				
FY 2001 EQUIPMENT																				
FY 2002 EQUIPMENT																				
FY 2003 EQUIPMENT																				
FY 2004 EQUIPMENT																				
FY 2005 EQUIPMENT																				
FY 2006 EQUIPMENT																				
FY 2007 EQUIPMENT																				
TO COMPLETE																				

INSTALLATION SCHEDULE:

	FY 2000 & Prior	FY 2001				FY 2002				FY 2003				FY 2004				FY 2005			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
In	200	71	0	0	0	30	0	0	0	120	0	0	0	-	-	-	-	-	-	-	-
Out	164	18	18	21	21	15	15	15	14	18	7	8	8	7	30	30	30	30	0	0	0

Input schedule reflects delivery of fleet baseline SLAM missiles to the contractor's site for modification.

FY2001 input quantity (71 missiles) includes 41 missiles procured with FY1999 Kosovo Supplemental Funding.

P-3A

CLASSIFICATION:

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BUDGET ITEM JUSTIFICATION SHEET P-40											DATE: February 2002	
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy/ BA-2							P-1 ITEM NOMENCLATURE STANDARD MISSILE (SM-2 MR/ER) A2FE BLI:223400					
Program Element for Code B Items:							Other Related Program Elements					
	Prior Years	ID Code		FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Program
QUANTITY	10,470	A		86	96	93	139	139	209	236	219	11,687
COST (\$M)	\$7,026.3	A		\$171.9	\$156.2	\$156.4	\$195.3	\$196.2	\$285.6	\$287.8	\$279.8	\$8,755.5
Initial Spares (\$M)	\$174.5	A		\$14.5	\$12.1	\$11.8	\$16.4	\$15.5	\$16.1	\$15.4	\$16.1	\$292.4
<p>(U) <u>PROGRAM OVERVIEW:</u></p> <p>(U) The STANDARD Missile SM-2 Medium Range (MR) and Extended Range (ER) are solid-propellant, tail-controlled surface-to-air missiles which are the main air defense battery for AEGIS guided missile cruisers and destroyers. The SM-2 Block IIIB, SM-2 Block IV and earlier variants are currently deployed.</p> <p>(U) Continually being upgraded to preserve battle group effectiveness against evolving cruise missile and Tactical Ballistic Missile (TBM) threats, SM-2 has improvements which will be procured for AEGIS cruisers and destroyers equipped with the MK41 Vertical Launch System (VLS). The SM-2 Block IIIB configuration improves the Block IIIA baseline through the Missile Homing Improvement Program (MHIP) to address a specific type of deployed threat. SM-2 Block IV, with a new separable booster, evolves the Block IIIA baseline missile to provide greater kinematic capability and dramatic increases in performance. The SM-2 Block IVA was a product improvement to the Block IV missile to provide a near term capability against TBMs with an objective of maintaining the current Block IV AAW capability. The SM-2 Block IVA program was cancelled beginning in FY02.</p> <p>(U) Beginning in FY02 Vertical Launching System (VLS) canister procurement funding was transferred from Other Missile Support (BLI 229000) into the STANDARD Missile program (BLI 223400). The canisters are used as a storage/shipping container for missiles ashore and as the magazine and firing tube aboard ship. In order to support the operating forces, it is necessary to have sufficient encanisterized missiles on hand to fill the logistic pipeline associated with the Combat Logistics Force (CLF) transportation times and mobilization considerations. To accomplish this, one canister is required for every VLS missile variant that is procured.</p>												

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

WEAPONS SYSTEM COST ANALYSIS P-5						Weapon System							DATE: February 2002			
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy/BA-2						ID Code		P-1 ITEM NOMENCLATURE/SUBHEAD STANDARD MISSILE (SM-2 MR/ER)/A2FE								
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS													
			Prior Years				FY 2001			FY 2002			FY 2003			
			Total Qty	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	
FE001	Missile Hardware GC&A/MK 72 AEGIS BLK IIIB AEGIS BLK IV AEGIS BLK IVA			294 160 11				75* N/A ** 11	619.31 N/A** 3,816.94***	46,448 2,929 41,986	96* 0	671.87 -	64,500 0 0	93 0	719.87 -	66,948 0
FE009	MK104 DTRM Mod 2						75	91.75****	6,881	96	80.20	7,699	93	83.01	7,720	
FE009	MK104 DTRM Mod 3						11	99.00****	1,089	0	-	0	0	-	0	
FE003	MK 54 S&A Device						86	10.93*****	940	96	9.83	944	93	10.17	946	
FE005	MK 45 TDD Mod 9/11						86	Var*****	6,057	96	104.91	10,072	93	106.63	9,917	
FE006	MK 125 Warhead						86	19.08	1,640	96	19.39	1,861	93	20.07	1,866	
FE007	TYPE I CANISTERS - SM-2 BLK IIIB (MK-13)								0	96*****	34.99	3,359	93	36.60	3,403	
	Total Missile Hardware								107,970			88,435			90,800	
	Procurement Support															
FE830	Contract Engineering								14,115			18,801			17,171	
FE830	Government In-House Engineering								5,954			4,170			3,904	
FE840	Quality Assurance								2,176			2,708			2,239	
FE954	Documentation								971			1,234			1,250	
FE955	Production Proof								3,516			4,835			4,428	
FE860	Eval Svc & Mat'l								12,781			9,298			10,736	
FE957	Containers								540			517			509	
FE950	Tools and Test Equipment								7,460			9,205			7,355	
FE850	Comp Improv								7,936			3,504			4,189	
	Total Procurement Support								55,449			54,272			51,781	
	Fleet Support															
FE970	Installation and Checkout Equip								2,310			5,095			4,420	
FE971	Special Handling Equip								770			381			309	
FE972	Training Material Exp and Non Exp								3,128			5,889			6,994	
FE973	Fleet Documentation								1,146			985			994	
FE980	ILS								1,082			1,097			1,125	
	Total Fleet Support								8,436			13,447			13,842	
	Modifications								49,039			35,057			56,163	
	Initial Spares								14,478			12,138			11,766	
* FY01 and FY02 SM-2 Blk IIIB GC&A unit price includes Plate 1 Government Furnished Equipment (GFE). The FY03 SM-2 Blk IIIB GC&A price reflects no GFE or complete impact of SM-2 Blk IVA program cancellation. ** Raytheon Blk IV overrun on N00024-96-C-5337 *** FY01 BLK IVA total cost includes \$4.1M for vendor requalification and parts obsolescence and \$0.3M for Rayon Life-of-Type buyout. **** FY01 MK 104 DTRM cost includes Denier Rayon buyout used in the MK 104 exit cone and aft closure due to the shut-down of the line producing carbonizable continuous filament rayon yarn for aerospace applications. ***** FY01 MK 54 S&A device cost includes Kaman life of type buy. ***** FY01 MK 45 TDD cost includes a mix of TDD assembly kits, new TDDs, Mod 11 ECP and Life-of-Type buyout . Excess TDDs in inventory were utilized with assembly kits. ***** Beginning in FY02 canister funding to support SM-2 Blk IIIB procurements was transferred from Other Missile Support BLI 229000.																
NOTE: The total line does not include Modifications and Initial Spares.																
			7,024,100						171,855			156,154			156,423	

UNCLASSIFIED

CLASSIFICATION:

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WEAPONS SYSTEM COST ANALYSIS P-5								Weapon System						DATE: February 2002					
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy/BA-2								ID Code		P-1 ITEM NOMENCLATURE/SUBHEAD STANDARD MISSILE (SM-2 MR/ER)/A2FE									
COST CODE	ELEMENT OF COST																		
		FY 2004			FY 2005			FY 2006			FY 2007			To Complete		Total			
		Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Cost	Quantity	Cost		
FE001	Missile Hardware																		
	GC&A/MK 72																		
	AEGIS BLK IIIB	139	698.40	97,077	139	713.53	99,181	209	704.46	147,232	236	705.79	166,567	219	159,418	1,500			
	AEGIS BLK IV			0			0			0			0			160			
	AEGIS BLK IVA	0	-	0	0	-	0	0	-	0	0	-	0	0	0	22			
FE009	MK104 DTRM MOD 2	139	84.75	11,780	139	86.53	12,028	209	88.34	18,463	236	90.20	21,287	219	20,346				
FE009	MK104 DTRM MOD 3	0	-	0	0	-	0	0	-	0	0	-	0	0	0				
FE003	MK 54 S&A Device	139	10.38	1,443	139	10.58	1,471	209	10.79	2,255	236	11.01	2,598	219	2,484				
FE005	MK 45 TDD MOD 9/11	139	106.89	14,858	139	90.78	12,618	209	90.74	18,965	236	91.93	21,695	219	20,737				
FE006	MK 125 Warhead	139	20.49	2,848	139	20.92	2,908	209	21.36	4,464	236	21.81	5,147	219	4,920				
FE007	TYPE I CANISTERS - SM-2 BLK IIIB (MK-13)	139	36.63	5,092	139	37.37	5,194	209	37.42	7,821	236	38.16	9,006	219	8,608				
	Missile Hardware Total			133,098			133,400			199,200			226,300		216,513				
	Procurement Support																		
FE830	Contract Engineering			18,806			20,876			20,446			21,123						
FE830	Government In-House Engineering			4,156			3,637			4,668			3,517						
FE840	Quality Assurance			2,471			2,087			2,307			2,100						
FE954	Documentation			1,409			963			909			909						
FE955	Production Proof			4,962			4,924			4,137			4,064						
FE860	Eval Svc & Mat'l			8,688			8,695			9,515			9,106						
FE957	Containers			504			500			495			475						
FE950	Tools and Test Equipment			6,033			5,677			17,092			5,880						
FE850	Comp Improv			2,241			4,706			5,025			4,371						
	Procurement Support Total			49,270			52,065			64,594			51,545		53,090				
	Fleet Support																		
FE970	Installation and Checkout Equip			4,185			2,772			12,686			2,159						
FE971	Special Handling Equip			529			694			1,665			679						
FE972	Training Material Exp and Non Exp			5,691			5,010			5,502			5,350						
FE973	Fleet Documentation			1,223			936			803			756						
FE980	ILS			1,335			1,308			1,125			1,000						
	Fleet Support Total			12,963			10,720			21,781			9,944		10,242				
	Modifications			53,717			60,342			61,507			62,732		76,104				
	Initial Spares			16,412			15,475			16,053			15,426		16,113				
	NOTE: The total line does not include Modifications or Initial Spares																		
				195,331			196,185			285,575			287,789	219	279,845	11,687	8,753,257		

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P-1 SHOPPING LIST

CLASSIFICATION:

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CLASSIFICATION:

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BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)						Weapon System		A. DATE			
B. APPROPRIATION/BUDGET ACTIVITY						C. P-1 ITEM NOMENCLATURE				SUBHEAD	
Weapons Procurement, Navy/BA-2						STANDARD MISSILE				A2FE	
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE	
UNIQUE SM-2 MR/ER HARDWARE											
FE001 GC&A/MK72 BOOSTER											
FY01 BLK IIIB AEGIS	75	619.31*	NAVSEA		SS/FFP/IF	RAYCO-TUCSON,AZ	03/01	02/03	YES		
FY01 BLK IVA AEGIS	11	3,816.94**	NAVSEA		SS/CP/IF/AF	RAYCO-TUCSON,AZ	12/00***	09/03	YES		
FY02 BLK IIIB AEGIS	96	671.87*	NAVSEA		SS/FFP/IF	RAYCO-TUCSON,AZ	03/02	01/04	YES		
FY03 BLK IIIB AEGIS	93	719.87*	NAVSEA		SS/FFP/IF	RAYCO-TUCSON,AZ	01/03	01/05	YES		
FE009 DTRM MK104											
FY01 MOD 2	75	91.75****	NAVSEA		SS/FFP/AF	ARC-Camden,AR	03/01	10/02	YES		
FY01 MOD 3	11	99.00****	NAVSEA		SS/FFP/AF	ARC-Camden,AR	03/01	10/02	YES		
FY02 MOD 2	96	80.20	NAVSEA		SS/FFP/AF	ARC-Camden,AR	03/02	10/03	YES		
FY03 MOD 2	93	83.01	NAVSEA		SS/FFP/AF	ARC-Camden,AR	03/03	10/04	YES		
FE007 TYPE I CANISTERS (MK-13) *****											
FY02	96	34.99	NAVSEA		FP/Option	UDLP-Minneapolis, MN	03/02	01/03	YES		
FY03	93	36.60	NAVSEA		FP/Option	UDLP-Minneapolis, MN	01/03	01/04	YES		
D. REMARKS											
* FY01 and FY02 SM-2 Blk IIIB GC&A unit price includes Plate 1 Government Furnished Equipment (GFE). The FY03 SM-2 Blk IIIB GC&A price reflects no GFE or complete impact of SM-2 Blk IVA program cancellation.											
** FY01 BLK IVA total cost includes \$4.1M for vendor requalification and parts obsolescence and \$0.3M for rayon Life-of-Type buyout.											
*** Contract award date for long lead material only.											
**** FY01 MK 104 DTRM cost includes Denier Rayon buyout used in the MK 104 exit cone and aft closure due to the shut-down of the line producing carbonizable continuous filament rayon yarn for aerospace applications.											
***** Beginning in FY02 canister funding to support SM-2 Blk IIIB procurements was transferred from Other Missile Support BLI 229000.											

CLASSIFICATION:

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BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)					Weapon System		A. DATE February 2002			
B. APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy/BA-2					C. P-1 ITEM NOMENCLATURE STANDARD MISSILE				SUBHEAD A2FE	
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
COMMON HARDWARE										
<u>FE003 SAFETY & ARMING DEVICE</u>										
FY01 MK54	86	10.93*	NAVSEA		SS/FFP	KAMAN- Middletown,CT	05/01	10/02	YES	
FY02 MK54	96	9.83	NAVSEA		SS/FFP	KAMAN- Middletown,CT	03/02	10/03	YES	
FY03 MK54	93	10.17	NAVSEA		SS/FFP	KAMAN- Middletown,CT	03/03	10/04	YES	
<u>FE005 ORDNANCE MK45 TDD</u>										
FY01 MOD 9/11	86	Various **	NAVSEA		MYP/SS/FFP/AF	MOTOROLA-Scottsdale,AZ	03/01	10/02	YES	
FY02 MOD 9/11	96	104.91	NAVSEA		MYP/SS/FFP/AF	MOTOROLA-Scottsdale,AZ	03/02	10/03	YES	
FY03 MOD 9/11	93	106.63	NAVSEA		MYP/SS/FFP/AF	MOTOROLA-Scottsdale,AZ	03/03	10/04	YES	
<u>FE006 WARHEAD MK125</u>										
FY01 MK125	86	19.08	NAVSEA		SS/FFP	AlliantTech-Magna,UT	09/01	12/02	YES	
FY02 MK 125	96	19.39	NAVSEA		SS/FFP	AlliantTech-Magna,UT	04/02	10/03	YES	
FY03 MK 125	93	20.07	NAVSEA		SS/FFP	AlliantTech-Magna,UT	04/03	10/04	YES	
D. REMARKS										
<p>* FY01 MK 54 S&A device cost includes Kaman life of type buy.</p> <p>** FY01 MK 45 TDD cost includes a mix of TDD assembly kits, new TDDs, Mod 11 ECP and Life-of-Type buyout.. Excess TDDs in inventory were utilized with assembly kits.</p>										

Exhibit P-21 Production Schedule

CLASSIFICATION:

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Exhibit P-20, Requirements Study				APPROPRIATION/BUDGET ACTIVITY WPN/BA-2 OTHER MISSILES			DATE: February-02	
P-1 ITEM NOMENCLATURE STANDARD Missile SM-2, MR, AEGIS VLS, BLOCK IIIB			Admin Leadtime (after Oct1): 3 MONTHS			Prod Leadtime : 24 MONTHS		
		FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007
Buy Summary		75	96	93	139	139	209	236
Unit Cost (\$M)		0.812	0.921	0.976	0.958	0.960	0.953	0.959
Total Cost (\$M)		\$60.9	\$88.4	\$90.8	\$133.1	\$133.4	\$199.2	\$226.3
Asset Dynamics								
Beginning Asset Position		251	349	571	753	899	1069	1273
Deliveries from all prior year funding		45	122	49				
Deliveries from FY 2001 funding				55	20			
Deliveries from FY 2002 funding					72	24		
Deliveries from FY 2003 funding						72	21	
Deliveries from subsequent years' funding							106	139
Other Gains		61	110	87	64	82	85	92
Combat Losses/Usage								
Training Losses/Usage		-8	-10	-9	-10	-8	-8	-5
Test Losses/Usage								
Other Losses/Usage								
Disposals/Retirements/Attritions/etc.								
End of Year Asset Position		349	571	753	899	1069	1273	1499
Inventory Objective or Current Authorized Allowance		3110	3656	3659	4052	4141	4220	4256
Inventory Objective FY03 FDP	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)		Vehicles Eligible for FY 2001 Replacement:		Aircraft: TOAI:
Assets Rqd For Combat	FY 2002 thru Dec 31:	FY 2002 thru December 31		FY 2002 thru December 31		Vehicles Eligible for FY 2002 Replacement:		PAA: TAI
Loads: 1840	1	0		0				
WRM Rqmt: 2301	FY 2001: 8	FY 2001: 0		FY 2001: 0		Vehicle Augment:		Attrition Res:
Pipeline: 130	FY 2000: 3	FY 2000: 0		FY 2000: 0				BAI
Other: 954	FY 1999: 11	FY 1999: 0		FY 1999: 0				Inactive Inv:
TOTAL: 5225								Storage:
Remarks: QUANTITIES INCLUDE USN ONLY								

P-1 SHOPPING LIST

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Exhibit P-20, Requirements Study			APPROPRIATION/BUDGET ACTIVITY WPN/BA-2 OTHER MISSILES				DATE: February-02	
P-1 ITEM NOMENCLATURE STANDARD Missile, SM-2, MR, AEGIS VLS, BLOCK IV			Admin Leadtime (after Oct1): 3 MONTHS			Prod Leadtime : 24 MONTHS		
		FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007
Buy Summary								
Unit Cost (\$K)		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Cost (\$K)		\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Asset Dynamics								
Beginning Asset Position		36	56	104	105	99	93	87
Deliveries from all prior year funding		50	57	7				
Deliveries from FY 2001 funding								
Deliveries from FY 2002 funding								
Deliveries from FY 2003 funding								
Deliveries from subsequent years' funding								
Other Gains								
Combat Losses/Usage								
Training Losses/Usage		-3	-9	-6	-6	-6	-6	-6
Test Losses/Usage								
Other Losses/Usage		-27						
Disposals/Retirements/Attritions/etc.								
End of Year Asset Position		56	104	105	99	93	87	81
Inventory Objective or Current Authorized Allowance *								
Inventory Objective FY03 FDP	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)	Vehicles Eligible for FY 2001 Replacement:	Aircraft: TOAI:			
Assets Rqd For Combat Loads:	FY 2002 thru December 31: 0	FY 2002 thru Dec 31: 0	FY 2002 thru Dec 31: 0	Vehicles Eligible for FY 2002 Replacement:	PAA: TAI			
WRM Rqmt:	FY 2001: 3	FY 2001: 0	FY 2001: 0	Vehicle Augment:	Attrition Res:			
Pipeline:	FY 2000: 2	FY 2000: 0	FY 2000: 0		BAI			
Other:	FY 1999: 3	FY 1999: 0	FY 1999: 0		Inactive Inv:			
TOTAL:					Storage:			
Remarks: QUANTITIES USN ONLY * No BLK IV Inventory Objective (IO) was established. A decision was made to cease production of the BLK IV after the LRIP procurement of 160 units due to the development of the BLK IVA follow-on. Block IVA was cancelled December 2001.								

P-1 SHOPPING LIST

CLASSIFICATION:

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BUDGET ITEM JUSTIFICATION SHEET**P-40****DATE:****February 2002**

APPROPRIATION/BUDGET ACTIVITY

Weapons Procurement, Navy/BA-2

P-1 ITEM NOMENCLATURE

ROLLING AIRFRAME MISSILE (RAM)**224200**

Program Element for Code B Items: 0604755N

Other Related Program Elements

	Prior Years	ID Code	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Program
QUANTITY	235	B	0	90	90	240	180	660	604	1,096	3195
COST (\$M)	\$111.0		\$22.7	\$42.7	\$58.4	\$130.4	\$89.1	\$304.6	\$225.7	\$535.3	\$1,519.9
Initial Spares (\$M)			\$2.5	\$2.3	\$1.9	\$1.0	\$1.9	\$2.8	\$2.5		

ITEM DESCRIPTION/JUSTIFICATION:

Rolling Airframe Missile (RAM) is a high fire-power, low cost, lightweight ship self-defense system to engage anti-ship missiles. Block 1 adds the capability of IR all-the-way guidance while maintaining the original dual-mode passive Radio Frequency/Infrared (RF/IR) guidance (Block 0). The RAM missile is fired from a RAM Guided Missile Launching System (MK-49) which holds 21 RAM rounds. Approval for full rate Block 1 production, Milestone III was granted on 20 January 2000.

FY01 funds procured 95 Block 1 Ordalts.

FY02 funds will procure 90 Block 1 Missiles

FY03 funds will procure 90 Block 1 Missiles and 55 Block 1 Ordalts

COOPERATIVE AGREEMENTS:

RAM is a NATO cooperative project with the Federal Republic of Germany. The RAM Production MOU, approved and signed by the US and Germany (GE) on 3 August 1987, specifies production procedures for the guided Missile Round Pack and coproduction of the Guided Missile Launching System. Missile limited production contracts were awarded to US (General Dynamics/Air Defense Systems Division) and German (RAM System GmbH) sources in 1989. As a result of the reduced US missile quantities and a desire to maintain production capabilities in both countries, an arrangement between the US and German producers, for single source coproduction of the German full-rate production quantities, was approved by both governments in November 1992 and this arrangement continues for US rate production. In August 1992, the acquisition of General Dynamics by Hughes Aircraft Company was approved, making Hughes Missile Systems Co. the US prime contractor. In January 1998, Raytheon acquired Hughes Missile Systems Co., making Raytheon the US prime contractor. The US and Germany signed a new Block 1 Production MOU on 18 December 2001 to cooperatively produce Block 1 missiles, launchers and ORDALTs.

WEAPONS PROCUREMENT, NAVY
FY 2002/03 DEPARTMENT OF THE NAVY BUDGET
MISSILE COST ANALYSIS
EXHIBIT P-5
(Dollars in Millions)

APPROPRIATION/BUDGET ACTIVITY: Weaspons Procurement, Navy/BA-2		ITEM NOMENCLATURE: ROLLING AIRFRAME MISSILE (RAM) LI#2242									DATE: Feb-02		
COST CODES	Cost Elements	FY 2001			FY 2002			FY 2003					
		Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost			
	<u>Missile Hardware</u>												
EF001	BLOCK 1 & G&CA	0	0	0	90	330.3	29,727	90	337.9	30,411			
EF001	GMRP Ordalts	95	164.1	15,587				55	223.7	12,304			
EF850	COMPONENT IMPR			386			2,000			1,853			
EF002	PROPULSION	0	0	0	90	9.7	873	90	9.9	891			
EF005	ORDNANCE PACK	0	0	0	90	27.0	2,430	145	27.9	4,046			
EF006	WARHEAD	0	0	0	60	4.3	256	60	6.7	402			
EF004	SAFE & ARM DEV	0	0	0	60	2.6	156	60	2.7	162			
EF010	TELEMETER				30	22.2	666	30	28.9	867			
	Total Hardware			15,973			36,108			50,935			
	<u>Procurement Support</u>												
EF830	CONTRACTOR EN			3,554			1,709			1,791			
EF830	GOVT INHOUSE EN			3,085			2,035			2,139			
EF860	PRODUCT ACCEPT			129			171			180			
	Total Procurement Support			6,768			3,915			4,110			
	MISSILE Flyaway Cost				90	444.7	40,023	90	442.6	39,837			
	GMRP Ordalts Flyaway Cost	95	239	22,741				55	276.5	15,208			
	<u>Fleet Support</u>												
EF974	ILS			0			408			532			
EF957	CONTAINER							150	3.5	525			
EF007	CANISTER				90	24.8	2,232	90	25.3	2,277			
	Total Fleet Support			0			2,640			3,334			
	Weapon System Cost			22,741			42,663			58,379			
	Modifications												
	Initial Spares			2,500			2,274			1,920			
	Total Program Cost			25,241			44,937			60,299			

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)					Weapon System			A. DATE February 2002		
B. APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy/BA2					C. P-1 ITEM NOMENCLATURE ROLLING AIRFRAME MISSILE (RAM)				SUBHEAD 22EF	
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
EF001 GUIDANCE & CONTROL ASSEMBLY FY 2002 BLOCK 1 MISSILE	90	330.3	NAVSEA	5/01	SS/FP	RAYTHEON, TUCSON,AZ	2/02	2/04	YES	
FY 2003 BLOCK 1 MISSILE	90	337.9	NAVSEA	5/02	SS/FP	OPTION	11/02	11/04	YES	
EF001 GMRP Ordalts FY 2001	95	164.1	NAVSEA	5/00	SS/FP	RAYTHEON, TUCSON,AZ	12/00	12/02	YES	
FY 2003	55	223.7	NAVSEA	5/02	SS/FP	RAYTHEON, TUCSON,AZ	11/02	11/04	YES	
EF002 PROPULSION ROCKET MOTOR MK112/1 ARMING & FIRING DEVICE MK298/1 FY2002	90	9.7	NAVSEA	5/01	C/FP	COMPETITIVE	2/02	10/03	YES	
FY2003	90	9.9	NAVSEA	5/02	C/FP	COMPETITIVE	11/02	07/04	YES	
EF005 ORDNANCE PACKAGE TARGET DETECT MK20 FY2002	90	27.0	NAVSEA	5/01	SS/FP	RAYTHEON, TUCSON,AZ	2/02	2/04	YES	
FY2003	145	27.9	NAVSEA	5/02	SS/FP	RAYTHEON, TUCSON,AZ	11/02	11/04	YES	
D. REMARKS Includes canisters										

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)					Weapon System		A. DATE February 2002			
B. APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy/BA2					C. P-1 ITEM NOMENCLATURE ROLLING AIRFRAME MISSILE (RAM)				SUBHEAD 22EF	
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
EF004 SAFE & ARMS MK 13/2										
FY 2002	60	2.6	NAVAIR	7/01	C/FP	COMPETITIVE	11/01	07/03	YES	
FY 2003	60	2.7	NAVAIR	7/02	C/FP	COMPETITIVE	11/02	07/04	YES	
EF006 WARHEAD WDU 17/8										
FY 2002	60	4.3	NAVAIR	5/01	C/FP	OPTION	2/02	10/03	YES	
FY 2003	60	6.7	NAVAIR	5/02	C/FP	COMPETITIVE	11/02	07/04	YES	
EF010 TELEMETER										
FY 2002	30	22.2	NAVSEA	5/01	SS/FP	CHINA LAKE	11/01	7/03	YES	
FY 2003	30	28.9	NAVSEA	5/02	SS/FP	CHINA LAKE	11/02	7/04	YES	
EF957 CONTAINERS										
FY 2003	150	3.5	NAVSEA	5/02	C/FP	COMPETITIVE	12/02	8/03	YES	
EF007 CANISTER										
FY 2002	90	24.8	NAVSEA	5/01	SS/FP	RAYTHEON, TUCSON,AZ	2/02	2/04	YES	
FY 2003	90	25.3	NAVSEA	5/02	SS/FP	OPTION	11/02	11/04	YES	
D. REMARKS										

FY 2002/03 BUDGET PRODUCTION SCHEDULE, P-21						DATE February 2002																									
APPROPRIATION/BUDGET ACTIVITY: WEAPONS PROCUREMENT, NAVY BA-2						Weapon System						P-1 ITEM NOMENCLATURE ROLLING AIRFRAME MISSILE (RAM)																			
						Production Rate			Procurement Leadtimes																						
Item	Manufacturer's Name and Location					MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure																	
5" Rolling Airframe Missile	Raytheon Company					90	20	480	0	3	24	24	24	Months																	
	Tucson, AZ																														
ITEM / MANUFACTURER						F Y	S V C	Q T Y	D E L	B A L	FISCAL YEAR 2001										FISCAL YEAR 2002										B A L
						2000			CALENDAR YEAR 2001										CALENDAR YEAR 2002												
						O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	B A L	
5" Rolling Airframe Missile/RC	98	N	94	54	40																						30	10	0		
5" Rolling Airframe Missile/RC	99	N	95		95																						20	75			
5" Rolling Airframe Missile/RC	00	N	90		90																							90			
5" Rolling Airframe Missile/RC	01	N																										90			
5" Rolling Airframe Missile/RC	02	N	90		90																A							90			
ITEM / MANUFACTURER						F Y	S V C	Q T Y	D E L	B A L	FISCAL YEAR 2003										FISCAL YEAR 2004										B A L
						2002			CALENDAR YEAR 2003										CALENDAR YEAR 2004												
						O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	B A L	
5" Rolling Airframe Missile/RC	99	N	95		75	40	35																						0		
5" Rolling Airframe Missile/RC	00	N	90		90		15	40	30	5																			0		
5" Rolling Airframe Missile/RC	01	N	0		0																								7		
5" Rolling Airframe Missile/RC	02	N	90		90																15	15	15	8	7	8	7	8	7		
5" Rolling Airframe Missile/RC	03	N	90		90		A																					90			
5" Rolling Airframe Missile/RC	04	N	240		240																A							240			
5" Rolling Airframe Missile/RC	05	n	180		180																							180			
Remarks:																															

CLASSIFICATION: UNCLASSIFIED

FY 2002/03 BUDGET PRODUCTION SCHEDULE, P-21											DATE		February 2002																				
APPROPRIATION/BUDGET ACTIVITY: WEAPONS PROCUREMENT, NAVY BA-2							Weapon System			P-1 ITEM NOMENCLATURE ROLLING AIRFRAME MISSILE (RAM)																							
						Production Rate			Procurement Leadtimes																								
Item	Manufacturer's Name and Location					MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure																			
5" Rolling Airframe Missile	Raytheon Company					90	20	480	0	3	24	24	24	Months																			
	Tucson, AZ																																
ITEM / MANUFACTURER						FISCAL YEAR 2005												FISCAL YEAR 2006												BAL			
						2004			CALENDAR YEAR 2005												CALENDAR YEAR 2006												
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP				
5" Rolling Airframe Missile/RC	02	N	90		7	7																				0							
5" Rolling Airframe Missile/RC	03	N	90		90		8	7	8	7	8	7	8	7	8											0							
5" Rolling Airframe Missile/RC	04	N	240		240											20	20	20	20	20	20	20	20	20	20	20							
5" Rolling Airframe Missile/RC	05	N	180		180		A																			180							
5" Rolling Airframe Missile/RC	06	N	660		660											A										660							
ITEM / MANUFACTURER						FISCAL YEAR 2007												FISCAL YEAR 2008												BAL			
						2006			CALENDAR YEAR 2006												CALENDAR YEAR 2008												
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP				
5" Rolling Airframe Missile/RC	04	N	150		180	20																				0							
5" Rolling Airframe Missile/RC	05	N	180		180		15	15	15	15	15	15	15	15	15											0							
5" Rolling Airframe Missile/RC	06	N	660		660											55	55	55	55	55	55	55	55	55	55	55							
5" Rolling Airframe Missile/RC	07	N	604		604																					604							
Remarks:																																	

CLASSIFICATION:UNCLASSIFIED

CLASSIFICATION:

BUDGET ITEM JUSTIFICATION SHEET										DATE:	
P-40										February 2002	
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy/2 - Other Missiles						P-1 ITEM NOMENCLATURE HELLFIRE II					
Program Element for Code B Items:						Other Related Program Elements					
	Prior* Years	ID Code	FY2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Program
QUANTITY	3,365	A	248	0	0	0	0	0	0	0	3,847
COST (\$M)	193.3		19.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	233.0
Initial Spares (\$M)	0.91		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.91
Total (\$M)	174.3		19.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	214.0
Unit Cost (\$M)	0.05		0.06	0	0	0	0	0	0	0	0.06
<p>The AGM-114K/M Hellfire II is a laser guided missile employed from DON attack helicopters. The Army is the executive service for the Hellfire II. The Hellfire II gives the DON attack helicopters the ability to defeat a variety of armor, urban, small patrol boat, and artillery type targets, while minimizing exposure to enemy air defenses.</p> <p>The DON has no planned future procurements for the Hellfire II missile. The FY 2001 Congressional plus-up assists in maintaining inventory levels.</p> <p>*Prior year funding is for HELLFIRE II AGM-114K/M only and does not include HELLFIRE AGM-114B.</p>											

**WEAPONS PROCUREMENT, NAVY
FY 2002 PRESIDENT'S BUDGET**

CLASSIFICATION: UNCLASSIFIED

**EXHIBIT P-5
(Dollars in Millions)**

Date: February 2002

Missile Nomenclature & Popular Name: HELLFIRE II

<u>Cost Elements</u>	Prior Years <u>Total Cost</u>	<u>FY 2001</u> <u>Quantity</u>	<u>Quantity</u> <u>Unit Cost</u>	<u>Total Cost</u>	<u>FY 2002</u> <u>Quantity</u>	<u>Quantity</u> <u>Unit Cost</u>	<u>Total Cost</u>	<u>FY 2003</u> <u>Quantity</u>	<u>Quantity</u> <u>Unit Cost</u>	<u>Total Cost</u>
<u>Missile Hardware</u>										
AUR	130.210	248	0.063	15.555						
Total Hardware	130.210	248		15.555						
<u>Recurring Production Support</u>										
Govt In-House	16.748			3.567						
Govt Test Program	5.526									
Contractor SE/PM	12.971			0.137						
Total Recurring Prod Support	35.245			3.704						
RECURRING FLYAWAY	165.455			19.259						
<u>Non-Recurring Costs</u>										
Acceptance Test Equipment										
Containers	2.007			0.257						
Total Non-Recurring Costs	2.007			0.257						
TOTAL MISSILE FLYAWAY	167.462			19.516						
<u>Fleet Support</u>										
Handling Equipment	0.694									
Training Equipment	0.466									
Data & Pubs	0.374			0.019						
Integrated Logistics Support	4.392			0.281						
Total Fleet Support	5.926			0.300						
Weapon System Cost	173.390			19.816						
Modifications										
Initial Spares	0.914									
Total Program Cost	174.304	248		19.816						

CLASSIFICATION:

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BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)					Weapon System		A. DATE February 2002			
B. APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy/2 - Other Missiles					C. P-1 ITEM NOMENCLATURE HELLFIRE II AGM-114K				SUBHEAD J2F6	
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
<u>HELLFIRE II</u>										
FY 2000	213	0.057	HUNTSVILLE, ALABAMA	APRIL 2000	MIPR/FFP	LOCKHEED MARTIN, ORLANDO, FL	9/00	09/02	YES	
FY 2000 *	21	0.063	HUNTSVILLE, ALABAMA	FEB 2001	MIPR/FFP	LOCKHEED MARTIN, ORLANDO, FL	9/01	06/03	YES	
FY 2001	248	0.063	HUNTSVILLE, ALABAMA	FEB 2001	MIPR/FFP	LOCKHEED MARTIN, ORLANDO, FL ORLANDO, FL	9/01	06/03	YES	
D. REMARKS *A quantity of 21 FY 00 funded units will be awarded with the FY01 contract. Delivery dates adjusted to reflect Army (Lead Service) contract delivery dates.										

DD Form 2445, JUL 87	Previous editions are obsolete	P-1 SHOPPING LIST	Exhibit P-21 Production Schedule
311 / 244		ITEM NO 12 PAGE 4	

CLASSIFICATION:

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BUDGET ITEM JUSTIFICATION SHEET P-40										DATE: FEBUARY 2002	
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy/BA-2; OTHER MISSILES						P-1 ITEM NOMENCLATURE AERIAL TARGETS (J2EM) PE: 0204228N / 0204162N					
Program Element for Code B Items: 0604258N, 0605130D, 0604366N						Other Related Program Elements N/A					
	Prior Years	ID Code	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total
QUANTITY											
COST (In Millions)	\$2,708.1	A	\$57.8	\$58.4	\$70.3	\$71.8	\$78.4	\$152.9	\$90.9	Cont.	Cont.
<p>PROGRAM COVERAGE:</p> <p>The Aerial Targets Program provides powered targets, towed targets and necessary Target Auxiliary and Augmentation Systems (TA/AS) equipment for fleet training, and weapons systems test and evaluation. This program is comprised of a series of continuing target production programs.</p> <p>JUSTIFICATION OF BUDGET YEAR REQUIREMENTS:</p> <p>In Fiscal Year 2003, major efforts include the continued procurement of Sub-Sonic Aerial Targets (SSAT), Supersonic Sea Skimming Targets (SSST) and TDU-32 Tow Targets. Continued TA/AS procurements include target command/control equipment, scoring equipment, location and identification equipment, navigation equipment, electronic countermeasures equipment, active emitter augmentation equipment and target control systems. The aerial targets and necessary TA/AS equipment provided from this program supports Navy air-to-air and surface-to-air training and weapons systems DT/OT testing.</p>											

P-1 SHOPPING LIST

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P-1 SHOPPING LIST

ITEM NO. 13

(1) Quantities are not displayed here because multiple types of targets are included in the line. Target quantities are identified on the detailed P-5 for "Other Targets".

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WEAPONS SYSTEM COST ANALYSIS									
P-5									
APPROPRIATION/BUDGET ACTIVITY					P-1 ITEM NOMECLATURE/SUBHEAD				
WEAPONS PROCUREMENT, NAVY BA-2 OTHER MISSILES					AERIAL TARGETS/J2EM				
COST CODE	ELEMENT OF COST	IDENT CODE	Prior Years Total Cost	FY 2001		FY 2002		FY 2003	
				QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
EM020	Anti-Air Warfare Target	A	\$174,570	0	\$900	0	\$0	0	\$0
EM030	Subsonic Aerial Target	A	\$400,108	78	\$27,234	108	\$34,724	104	\$31,536
EM200	OTHER TARGETS (2)	B	\$126,642		\$16,068		\$7,972		\$23,040
EM300	TA/AS	A	\$189,318		\$13,564		\$15,660		\$15,756
	VARIOUS		\$1,817,484		\$0		\$0		\$0
TOTAL			\$2,708,122	78	\$57,766	108	\$58,356	104	\$70,332
SPARES (1)									
	Anti-Air Warfare Target		\$0		\$0		\$0		\$0
	Subsonic Aerial Target		\$455		\$0		\$0		\$0
	OTHER TARGETS		\$703		\$0		\$0		\$0
	TA/AS		\$551		\$441		\$325		\$350
	VARIOUS		\$53,947		\$0		\$0		\$0
	TOTAL SPARES		\$55,656		\$441		\$325		\$350
TOTAL PROGRAM			\$2,763,778	78	\$58,207	108	\$58,681	104	\$70,682

P-1 SHOPPING LIST

ITEM NO. 13

PAGE NO. 3

(1) Initial spares requirements are displayed for information purposes only and are budgeted in Budget Activity 6, Spare and Repair Parts.

(2) Quantities are not displayed here because multiple types of targets are included in the line. Target quantities are identified on the detailed P-5 for "Other Targets".

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WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5)

TARGET SYSTEM: ANTI-AIR WARFARE TARGET (AAW) MANUFACTURER: RAYTHEON AIRCRAFT, WICHITA, KS COST CODE: EM020 FLYAWAY COST (\$000)	FISCAL YEAR 2001			FISCAL YEAR 2002			FISCAL YEAR 2003			TO	TOTAL COST	
	Prior Yrs Total Cost	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST		COMPLETE COSTS
HARDWARE:												
TARGET	\$114,019	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	Cont.	Cont.
GFM-BATTERIES	\$1,996			\$0			\$0			\$0	Cont.	Cont.
GFM-IRFNA (1)	\$3,691			\$0			\$0			\$0	Cont.	Cont.
INSTALL/MISSION KITS	\$13,293			\$0			\$0			\$0	Cont.	Cont.
EXTENDED PERFORMANCE KITS (2)	\$4,626			\$0			\$0			\$0	Cont.	Cont.
TOTAL HARDWARE	\$137,625	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	Cont.	Cont.
PROCUREMENT SUPPORT (RECURRING):												
GOVERNMENT IN-HOUSE (3)	\$13,169			\$900			\$0			\$0	Cont.	Cont.
DOCUMENTATION	\$2,657			\$0			\$0			\$0	Cont.	Cont.
GOVERNMENT TEST	\$2,212			\$0			\$0			\$0	Cont.	Cont.
TOTAL RECURRING	\$18,038			\$900			\$0			\$0	Cont.	Cont.
PROCUREMENT SUPPORT (NONRECURRING):												
PRODUCT IMPROVEMENT	\$13,364			\$0			\$0			\$0	Cont.	Cont.
SPECIAL TOOLING AND TEST EQUIPMENT	\$0			\$0			\$0			\$0	Cont.	Cont.
TOTAL NONRECURRING	\$13,364			\$0			\$0			\$0	Cont.	Cont.
TOTAL FLYAWAY	\$169,027	0	\$0	\$900	0	\$0	\$0	0	\$0	\$0	Cont.	Cont.
GROUND EQUIPMENT/FLEET SUPPORT COST:												
GROUND EQUIPMENT	\$0			\$0			\$0			\$0	Cont.	Cont.
INSTALL & CHECKOUT	\$0			\$0			\$0			\$0	Cont.	Cont.
SPECIAL HANDLING EQUIPMENT	\$0			\$0			\$0			\$0	Cont.	Cont.
FLEET TEST EQUIPMENT	\$469			\$0			\$0			\$0	Cont.	Cont.
TRAINING DEVICES	\$272			\$0			\$0			\$0	Cont.	Cont.
DOCUMENTATION	\$242			\$0			\$0			\$0	Cont.	Cont.
ILS	\$4,560			\$0			\$0			\$0	Cont.	Cont.
TOTAL GRD EQUIP/FLEET SUP COST	\$5,543			\$0			\$0			\$0	Cont.	Cont.
WEAPONS SYSTEM COST	\$174,570	0	\$0	\$900	0	\$0	\$0	0	\$0	\$0	Cont.	Cont.
TARGETS INITIAL SPARES	\$0			\$0			\$0			\$0	Cont.	Cont.
TOTAL PROGRAM COST	\$174,570	0	\$0	\$900	0	\$0	\$0	0	\$0	\$0	Cont.	Cont.

P-1 SHOPPING LIST

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WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5)

TARGET SYSTEM: SUBSONIC AERIAL TARGET MANUFACTURER: NORTHROP-GRUMMAN COST CODE: EM030 FLYAWAY COST (\$000)	Prior Yrs Total Cost	FISCAL YEAR 2001			FISCAL YEAR 2002			FISCAL YEAR 2003			TO COMPLETE COSTS	TOTAL COST
		QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST		
HARDWARE:												
TARGET	\$321,702	78	\$259	\$20,196	108	\$243	\$26,244	104	\$247	\$25,688	Cont.	Cont.
INSTALL/MISSION KITS	\$43,390			\$3,418			\$4,834			\$3,639	Cont.	Cont.
TOTAL HARDWARE	\$365,092	78	\$303	\$23,614	108	\$288	\$31,078	104	\$282	\$29,327	Cont.	Cont.
PROCUREMENT SUPPORT (RECURRING):												
GOVERNMENT IN-HOUSE	\$16,374			\$1,450			\$1,434			\$1,375	Cont.	Cont.
DOCUMENTATION	\$2,054			\$150			\$154			\$158	Cont.	Cont.
GOVERNMENT TEST	\$2,499			\$425			\$433			\$26	Cont.	Cont.
TOTAL RECURRING	\$20,927			\$2,025			\$2,021			\$1,559	Cont.	Cont.
PROCUREMENT SUPPORT (NONRECURRING):												
PRODUCT IMPROVEMENT	\$1,769			\$0			\$0			\$0	Cont.	Cont.
SPECIAL TOOLING AND TEST EQUIPMENT	\$0			\$0			\$0			\$0	Cont.	Cont.
TOTAL NONRECURRING	\$1,769			\$0			\$0			\$0	Cont.	Cont.
TOTAL FLYAWAY	\$387,788	78	\$329	\$25,639	108	\$306	\$33,099	104	\$297	\$30,886	Cont.	Cont.
GROUND EQUIPMENT/FLEET SUPPORT COST:												
GROUND EQUIPMENT	\$4,866			\$900			\$917			\$0	Cont.	Cont.
INSTALL & CHECKOUT	\$0			\$0			\$0			\$0	Cont.	Cont.
SPECIAL HANDLING EQUIPMENT	\$0			\$0			\$0			\$0	Cont.	Cont.
FLEET TEST EQUIPMENT	\$0			\$0			\$0			\$0	Cont.	Cont.
TRAINING DEVICES	\$335			\$45			\$46			\$35	Cont.	Cont.
DOCUMENTATION	\$998			\$0			\$0			\$0	Cont.	Cont.
ILS	\$6,121			\$650			\$662			\$615	Cont.	Cont.
TOTAL GRD EQUIP/FLEET SUP COST	\$12,320			\$1,595			\$1,625			\$650	Cont.	Cont.
WEAPONS SYSTEM COST	\$400,108	78	\$349	\$27,234	108	\$322	\$34,724	104	\$303	\$31,536	Cont.	Cont.
TARGETS INITIAL SPARES	\$455			\$0			\$0			\$0	Cont.	Cont.
TOTAL PROGRAM COST	\$400,563	78	\$349	\$27,234	108	\$322	\$34,724	104	\$303	\$31,536	Cont.	Cont.

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WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5)

FEBRUARY 2002

FEBRUARY 2002

TARGET SYSTEM: OTHER TARGETS MANUFACTURER: VARIOUS COST CODE: EM200 FLYAWAY COST (\$000)	Prior Yrs Total Cost	FISCAL YEAR 2001			FISCAL YEAR 2002			FISCAL YEAR 2003			TO COMPLETE COSTS	TOTAL COST
		QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST		
HARDWARE:												
Supersonic Sea Skimming Target (SSST)	\$26,111	2	\$1,184	\$2,367	5	\$640	\$3,200	20	\$969	\$19,386	Cont.	Cont.
Supersonic Sea Skimming Target (SSST)	\$0	10	\$804	\$8,039								
INSTALL/MISSION KITS								20	\$16	\$312		
FOREIGN NDI - SUPERSONIC	\$725			\$0			\$0			\$0	Cont.	Cont.
FOREIGN NDI - SUBSONIC	\$0			\$0			\$0			\$0	Cont.	Cont.
TOW TARGETS	\$4,018	500	\$2.95	\$1,474	500	\$3.06	\$1,529	500	\$3.14	\$1,568	Cont.	Cont.
SM-2 TARGET	\$2,000			\$0			\$0			\$0	\$0	\$2,000
MQM-8G(EER) VANDAL	\$67,370			\$0			\$0			\$0	\$0	\$67,370
TOTAL HARDWARE	\$100,224			\$11,880			\$4,729			\$21,266	Cont.	Cont.
PROCUREMENT SUPPORT (RECURRING):												
GOVERNMENT IN-HOUSE	\$11,853			\$1,854			\$1,328			\$1,732	Cont.	Cont.
DOCUMENTATION	\$1,039			\$0			\$0			\$0	Cont.	Cont.
GOVERNMENT TEST	\$300			\$0			\$0			\$42	Cont.	Cont.
TOTAL RECURRING	\$13,192			\$1,854			\$1,328			\$1,774	Cont.	Cont.
PROCUREMENT SUPPORT (NONRECURRING):												
PRODUCT IMPROVEMENT	\$3,726			\$0			\$0			\$0	Cont.	Cont.
CONTRACTOR ENGINEERING	\$1,435			\$1,109			\$1,615			\$0	Cont.	Cont.
SPECIAL TOOLING AND TEST EQUIPMENT	\$0			\$709			\$0			\$0	Cont.	Cont.
TOTAL NONRECURRING	\$5,161			\$1,818			\$1,615			\$0	Cont.	Cont.
TOTAL FLYAWAY	\$118,577	0	\$0	\$15,552	0	\$0	\$7,672	0	\$0	\$23,040	Cont.	Cont.
GROUND EQUIPMENT/FLEET SUPPORT COST:												
GROUND EQUIPMENT	\$2,854			\$300			\$300			\$0	Cont.	Cont.
INSTALL & CHECKOUT	\$0			\$0			\$0			\$0	Cont.	Cont.
SPECIAL HANDLING EQUIPMENT	\$5			\$0			\$0			\$0	Cont.	Cont.
FLEET TEST EQUIPMENT	\$968			\$0			\$0			\$0	Cont.	Cont.
TRAINING DEVICES	\$64			\$0			\$0			\$0	Cont.	Cont.
DOCUMENTATION	\$1,665			\$0			\$0			\$0	Cont.	Cont.
ILS	\$2,509			\$216			\$0			\$0	Cont.	Cont.
TOTAL GRD EQUIP/FLEET SUP COST	\$8,065			\$516			\$300			\$0	Cont.	Cont.
WEAPONS SYSTEM COST	\$126,642			\$16,068			\$7,972			\$23,040	Cont.	Cont.
TARGETS INITIAL SPARES	\$703			\$0			\$0			\$0	Cont.	Cont.
TOTAL PROGRAM COST	\$127,345			\$16,068			\$7,972			\$23,040	Cont.	Cont.

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UNCLASSIFIED**WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5)****FEBRUARY 2002 FEBRUARY 2002**

TARGET SYSTEM TAAS MANUFACTURER: VARIOUS COST CODE: EM300 FLYAWAY COST (\$000)	Prior Yrs Total Cost	FISCAL YEAR 2001 QTY UNIT COST TOTAL COST	FISCAL YEAR 2002 QTY UNIT COST TOTAL COST	FISCAL YEAR 2003 QTY UNIT COST TOTAL COST	TO COMPLETE COSTS	TOTAL COST
HARDWARE:						
CMD/CONTROL EQUIPMENT	\$31,610		\$2,180	\$1,000	\$3,600	Cont. Cont.
SCORING EQUIPMENT	\$20,143		\$558	\$437	\$826	Cont. Cont.
LOCATION/ID EQUIPMENT	\$14,654		\$420	\$788	\$403	Cont. Cont.
ECM/EMITTER EQUIPMENT	\$44,206		\$4,810	\$5,355	\$4,540	Cont. Cont.
AUGMENTATION/NAVIGATION EQUIPMENT	\$10,381		\$771	\$2,456	\$164	
INSTALL/MISSION EQUIPMENT	\$2,427		\$566	\$583	\$601	
MOBILE SEA RANGE	\$12,868		\$0	\$0	\$0	Cont. Cont.
TOTAL HARDWARE	\$136,289		\$9,305	\$10,619	\$10,134	Cont. Cont.
PROCUREMENT SUPPORT (RECURRING):						
GOVERNMENT IN-HOUSE	\$33,256		\$3,008	\$3,637	\$4,286	Cont. Cont.
DOCUMENTATION	\$99		\$165	\$170	\$170	Cont. Cont.
GOVERNMENT TEST	\$276		\$51	\$55	\$60	Cont. Cont.
TOTAL RECURRING	\$33,631		\$3,224	\$3,862	\$4,516	Cont. Cont.
PROCUREMENT SUPPORT (NONRECURRING):						
PRODUCT IMPROVEMENT	\$1,902		\$0	\$0	\$0	Cont. Cont.
SPECIAL TOOLING AND TEST EQUIPMENT	\$0		\$0	\$0	\$0	Cont. Cont.
TOTAL NONRECURRING	\$1,902		\$0	\$0	\$0	Cont. Cont.
TOTAL FLYAWAY	\$171,822		\$12,529	\$14,481	\$14,650	Cont. Cont.
GROUND EQUIPMENT/FLEET SUPPORT COST:						
GROUND EQUIPMENT	\$488		\$143	\$256	\$174	Cont. Cont.
INSTALL & CHECKOUT	\$917		\$0	\$0	\$0	Cont. Cont.
SPECIAL HANDLING EQUIPMENT	\$0		\$0	\$0	\$0	Cont. Cont.
FLEET TEST EQUIPMENT	\$2,002		\$0	\$0	\$0	Cont. Cont.
TRAINING	\$754		\$320	\$320	\$320	Cont. Cont.
DOCUMENTATION	\$0		\$0	\$0	\$0	Cont. Cont.
ILS	\$13,335		\$572	\$603	\$612	Cont. Cont.
TOTAL GRD EQUIP/FLEET SUP COST	\$17,496		\$1,035	\$1,179	\$1,106	Cont. Cont.
WEAPONS SYSTEM COST	\$189,318		\$13,564	\$15,660	\$15,756	Cont. Cont.
TARGETS INITIAL SPARES	\$551		\$441	\$325	\$350	Cont. Cont.
TOTAL PROGRAM COST	\$189,869		\$14,005	\$15,985	\$16,106	Cont. Cont.

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BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)									A. DATE	
									FEBRUARY 2002	
B. APPROPRIATION/BUDGET ACTIVITY					C. P-1 ITEM NOMENCLATURE				SUBHEAD	
Weapons Procurement, Navy/BA-2; Other Missiles					AERIAL TARGETS				J2EM	
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
Anit-Air Warfare Tgt/FY-99	35	156	NAVAIR		SS/FP	Raytheon A/C, Wichita, KS	JUN 99	JAN 01	Yes	MAY 98
Subsonic Aerial Target/FY-00	71	279	NAVAIR		C/Option	Northrop-Grumman, Hawthorne, CA	FEB 00	MAR 01		
Subsonic Aerial Target/FY-01	78	259	NAVAIR		C/FP	Northrop-Grumman, Hawthorne, CA	APR 01	FEB 02		
Subsonic Aerial Target/FY-02	108	243	NAVAIR		C/Option	Northrop-Grumman, Hawthorne, CA	JAN 02	FEB 03		
Subsonic Aerial Target/FY-03	104	247	NAVAIR		C/Option	Northrop-Grumman, Hawthorne, CA	JAN 03	FEB 04		
Supersonic Sea Skimming Target										
SSST /FY-99	15	630	NAVAIR		SS/FP	Boeing, St. Louis, MO	OCT 01	FEB 02		
SSST/FY-00	14	630	NAVAIR		SS/Option	Boeing, St. Louis, MO	OCT 01	JUL 02		
SSST/FY-01	2	630	NAVAIR		SS/Option	Boeing, St. Louis, MO	OCT 01	NOV 02		
SSST/FY-01	10	680	NAVAIR		SS/Option	Orbital Sciences, Chandler, AZ	NOV 01	DEC 03		
SSST/FY-02	5	640	NAVAIR		SS/Option	Boeing, St. Louis, MO	FEB 02	MAR 03		
SSST/FY-03	20	969	NAVAIR		C/CPIF	TBD	JUN 03	JUL 04		
D. REMARKS										
SSST FY03 unit cost reflects more capable "Threat C" representative target.										

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DD Form 2445, JUL 87 Previous editions are obsolete P-1 SHOPPING LIST

311/244 ITEM NO: 13 PAGE NO: 15 Exhibit P-21 Production Schedule

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FY 2003 BUDGET PRODUCTION SCHEDULE, P-21										DATE FEBRUARY 2002																
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy/BA-2 - OTHER MISSILES						Weapon System		P-1 ITEM NOMENCLATURE AERIAL TARGETS																		
		Production Rate			Procurement Leadtimes																					
Item	Manufacturer's Name and Location					MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure												
Supersonic Sea Skimming Tgt.	Boeing, St Louis, MO					N/A	N/A	42+			13			E												
Supersonic Sea Skimming Tgt.	Orbital Sciences, Chandler, AZ					N/A	N/A	42+			25			E												
ITEM / MANUFACTURER		F Y	S V C	Q T Y	D E L	B A L	FISCAL YEAR 2000										B A L									
							1999		CALENDAR YEAR 2000									CALENDAR YEAR 2001								
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L		A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R
ITEM / MANUFACTURER		F Y	S V C	Q T Y	D E L	B A L	FISCAL YEAR 2002										B A L									
							2001		CALENDAR YEAR 2002									CALENDAR YEAR 2003								
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L		A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R
SSST/Boeing	99	N	15	0	15	A				3	3	3	3	3												0
SSST/Boeing	00	N	14	0	14	A								3	3	4	4									0
SSST/Boeing	01	N	2	0	2	A										1	1									0
SSST/Orbital Sciences	01	N	10	0	10		A																			10
SSST/Boeing	02	N	5	0	5				A										3	2						0
SSST/TBD	03	N	20	0	20																A					20
Remarks: Delay in delivery of FY99/00/01 procured targets are due to contract restructure.																										

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DD Form 2445, JUL 87
311 / 244

Previous editions are obsolete

P-1 SHOPPING LIST

ITEM NO:13

PAGE NO:17

Exhibit P-21 Production Schedule

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CLASSIFICATION: **UNCLASSIFIED**

BUDGET ITEM JUSTIFICATION SHEET										DATE:	
P-40										February 2002	
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy/BA-2/OTHER MISSILES							P-1 ITEM NOMENCLATURE DRONES AND DECOYS (J2DJ)				
Program Element for Code B Items:							Other Related Program Elements N/A				
	Prior Years	ID Code	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Program
QUANTITY											
COST (\$M)	\$243.5		\$14.9	\$13.9	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$272.3
<p>PROGRAM COVERAGE:</p> <p>Funding for Drones and Decoys from FY 1986 through FY 1993 was used for continued procurements of ADM-141 Tactical Air Launched Decoy (TALD) units, which are non-powered, glide trajectory driven vehicles. The ADM-141 TALD is an expendable of similar size to a 500 pound general purpose bomb, and is carried similarly. After launched from strike aircraft, the ADM-141 TALD uses radar signature augmentation and preprogrammed flight profiles to simulate manned aircraft. Its mission is to deceive and saturate hostile radar controlled air defenses, thus enhancing strike aircraft survivability. Currently, the F/A-18, F-14 and S-3 are fully qualified to deploy the ADM-141 TALD in both land Based and CV operations. Additionally, an AV-8B/TALD capability is planned.</p> <p>FY01 funding was provided by Congress for the Improved Tactical Air Launch Decoy (ITALD) Program to procure approximately 70 ITALDS with GPS.</p> <p>FY02 funding was provided by Congress for the Improved Tactical Air Launch Decoy (ITALD) Program to procure approximately 76 ITALDS with GPS.</p>											

WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5)

February 2002

February 2002

TARGET SYSTEM: ITALD MANUFACTURER: IIMI LTD, RATAT HASHARON, ISRAEL COST CODE: DJ010 FLYAWAY COST (\$000)	Prior Yrs Total Cost	FISCAL YEAR 2001			FISCAL YEAR 2002			FISCAL YEAR 2003			TO COMPLETE COSTS	TOTAL COST
		QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST		
HARDWARE:												
ITALD (1)	\$39,084	70	\$154	\$10,772	76	\$154	\$11,695	0	\$0	\$0	\$0	\$61,551
CONTAINERS	\$420	75	\$5	\$375	38	\$5	\$190			\$0	\$0	\$985
TOTAL HARDWARE	\$39,504	70	\$159	\$11,147	76	\$159	\$11,885	0	\$0	\$0	\$0	\$62,536
PROCUREMENT SUPPORT (RECURRING):												
CONTRACTOR ENGINEERING	\$812			\$0			\$0			\$0	\$0	\$812
GOVERNMENT IN-HOUSE	\$5,521			\$1,767			\$1,799			\$0	\$0	\$9,087
DOCUMENTATION	\$466			\$300			\$0			\$0	\$0	\$766
GOVERNMENT TEST	\$2,139			\$0			\$0			\$0	\$0	\$2,139
TOTAL RECURRING	\$8,938			\$2,067			\$1,799			\$0	\$0	\$12,804
PROCUREMENT SUPPORT (NONRECURRING):												
PRODUCT IMPROVEMENT	\$11,332			\$1,361			\$0			\$0	\$0	\$12,693
CONTRACTOR ENGINEERING	\$0			\$0			\$0					
SPECIAL TOOLING AND TEST EQUIPMENT	\$0			\$0			\$0			\$0	\$0	\$0
TOTAL NONRECURRING	\$11,332			\$1,361			\$0			\$0	\$0	\$12,693
TOTAL FLYAWAY	\$59,774	70	\$208	\$14,575	76	\$180	\$13,684	0	\$0	\$0	\$0	\$88,033
GROUND EQUIPMENT/FLEET SUPPORT COST:												
GROUND EQUIPMENT	\$0			\$0			\$0			\$0	\$0	\$0
INSTALL & CHECKOUT	\$0			\$0			\$0			\$0	\$0	\$0
SPECIAL HANDLING EQUIPMENT	\$0			\$0			\$0			\$0	\$0	\$0
FLEET TEST EQUIPMENT	\$0			\$0			\$0			\$0	\$0	\$0
TRAINING DEVICES	\$24			\$104			\$0			\$0	\$0	\$128
DOCUMENTATION	\$0			\$183			\$199			\$0	\$0	\$382
ILS	\$784			\$0			\$0			\$0	\$0	\$784
TOTAL GRD EQUIP/FLEET SUP COST	\$808			\$287			\$199			\$0	\$0	\$1,294
WEAPONS SYSTEM COST	\$60,582	70	\$212	\$14,862	76	\$183	\$13,883	0	\$0	\$0	\$0	\$89,327
VARIOUS 1/	\$182,967											\$182,967
TARGETS INITIAL SPARES	\$0			\$0			\$0			\$0	\$0	\$0
TOTAL PROGRAM COST	\$243,549	70	\$212	\$14,862	76	\$183	\$13,883	0	\$0	\$0	\$0	\$272,294

P-1 SHOPPING LIST

(1) Conversion of Talds to GPS Italds.

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BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)									A. DATE	
									February 2002	
B. APPROPRIATION/BUDGET ACTIVITY					C. P-1 ITEM NOMENCLATURE				SUBHEAD	
Weapons Procurement, Navy/BA-2; Other Missiles					DRONES AND DECOYS				J2DJ	
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
ADM-141C/FY01	70	154	NAVAIR	N/A	SS/FP	Ramat Hasharon, IS Israeli Military Industries,	May 02	Jul 03	Yes	N/A
ADM-141C/FY02	76	154	NAVAIR	N/A	SS/FP	Ramat Hasharon, IS Israeli Military Industries	May 02	Nov 03	Yes	N/A
D. REMARKS										

FY 2003 BUDGET PRODUCTION SCHEDULE, P-21						DATE February 2002																									
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy/BA-2 Other Missiles						Weapon System		P-1 ITEM NOMENCLATURE DRONES AND DECOYS (J2DJ)																							
						Production Rate			Procurement Leadtimes																						
Item	Manufacturer's Name and Location					MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure																	
ADM-14C/IMI	IMI, Ramat Hasharon, IS (ITALD)					20	100	200			14			E																	
ITEM / MANUFACTURER		F Y	S V C	Q T Y	D E L	B A L	FISCAL YEAR 2000									FISCAL YEAR 2001									B A L						
							1999			CALENDAR YEAR 2000									CALENDAR YEAR 2001												
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
ITEM / MANUFACTURER		F Y	S V C	Q T Y	D E L	B A L	FISCAL YEAR 2002									FISCAL YEAR 2003									B A L						
							2001			CALENDAR YEAR 2002									CALENDAR YEAR 2003												
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
ADM-141C/IMI		01	N	70	0	70								A														15	15	20	20
ADM-141C/IMI		02	N	76	0	76								A																	76

CLASSIFICATION:

BUDGET ITEM JUSTIFICATION SHEET										DATE:	
P-40										February 2002	
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy/2					P-1 ITEM NOMENCLATURE OTHER MISSILE SUPPORT/2290						
Program Element for Code B Items: N/A					Other Related Program Elements N/A						
	Prior Years	ID Code	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Program
QUANTITY											0
COST (\$M)	\$45.4	A	\$14.7	\$9.7	\$12.0	\$11.5	\$11.0	\$11.2	\$10.2	N/A	\$125.7
Initial Spares (\$M)	\$1.7		\$0.7	\$0.7	\$0.6	\$0.6	\$0.6	\$0.6	\$0.6	N/A	\$6.1
<p>The MK-41 Vertical Launching System (VLS) is a surface combatant missile launching system, designed to store, select and launch Various STANDARD Missile configurations, TOMAHAWK, Tactical TOMAHAWK, EVOLVED SEASPARROW (ESSM) and Vertical Launch ASROC (VLA) missiles. The MK-41 VLS significantly improves missile capacity, flexibility, multi-mission capability, reaction time and rate of fire and is designed to be adaptable to present and future weapon systems. Current configurations are: two 61 cell launchers, forward and aft, for 22 TICONDEROGA (CG 47) Class Cruisers beginning with CG-52; one 61 cell launcher forward for 19* SPRUANCE (DD 963) Class Destroyers; and one 64 cell and one 32 cell launcher for 58 ARLEIGH BURKE (DDG 51) Class Destroyers. Current DDG 51 FLT IIA is a 64 cell launcher aft and one 32 cell launcher forward. Each eight cell MK-41VLS module has the capacity for 8 canisters.</p> <p>WPN provides funds for ILS support and initial training support for MK-41 VLS, canisters and canister support equipment. The funding is for Engineering Change Proposal (ECP) and Ordnance Alteration (ORDALT) development, procurement, installation, production support, technical documentation for MK-41 VLS, canister and gas management hardware. In addition, funding is required for: training for new missile variants (STANDARD Missile BLK IV/IVA, ESSM, and Tactical TOMAHAWK); to provide MK-41 VLS unique equipment to the weapon facilities; and to provide ILS for various canisters and gas management configurations.</p> <p>In FY01 and prior, MK-41 VLS canisters were funded under MK-41 VLS BLI #2290 for STANDARD Missile variants and TOMAHAWK. Beginning in FY-02, canisters are budgeted with the End Item under STANDARD Missile BLI 2234 and TOMAHAWK BLI 2101. Budgeting with the End Item is now consistent across all missile types. The EVOLVED SEASPARROW Missile (ESSM) with Quad Pack (ESSM/QP) canisters were budgeted beginning in FY-01 Procurement under EVOLVED SEASPARROW (ESSM) BLI #2307.</p> <p>* 5 SPRUANCE (DD 963) Class Ships are being decommissioned through FY-02 bringing the total to 19 DD-963's.</p>											

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WEAPONS SYSTEM COST ANALYSIS P-5						Weapon System							DATE: February 2002		
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy/BA-2						ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD OTHER MISSILE SUPPORT/2290 (A2FD)								
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS												
			Prior Years				FY 2001			FY 2002			FY 2003		
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
FD005	TYPE I CANISTERS SM-2 MR BLK III/IIIA/IIIB (MK-13)		7,264				75	33.5	2,510						
FD006	TYPE II CANISTERS SM-2 BLK IV (MK-21 MOD 0) SM-2 BLK IV/IVA (MK-21 MOD 1)		10,106 1,886				15	157.1	2,356						
FD009	CANISTER EQUIPMENT		3,901						1,599			2,004			4,305
FD970	ILS SUPPORT		21,252						7,792			7,111			7,154
FD980	INITIAL TRAINING SUPPORT		950						435			573			580
			45,359						14,692			9,688			12,039

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BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)					Weapon System		A. DATE February 2002			
B. APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy/2					C. P-1 ITEM NOMENCLATURE OTHER MISSILE SUPPORT/2290				SUBHEAD A2FD	
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
FY 01 FD005/TYPE I CANS SM-2 BLK III/IIIA/IIIB	75	33.5	NAVSEA		FP/ OPT	United Defense, L.P. MINNEAPOLIS, MN	11/00	02/02	YES	
FD006/ TYPE II CANS SM-2 BLK IV/IVA	15	157.1	NAVSEA		FP/ OPT	United Defense, L.P. MINNEAPOLIS, MN	01/01	04/02	YES	
D. REMARKS FY02 AND FOLLOW -ON CANISTERS ARE FUNDED IN THE MISSILE SPECIFIC BUDGET LINE ITEM.										

[illegible]

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BUDGET ITEM JUSTIFICATION SHEET P-40										DATE: February 2002		
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy/ BA - 2 Other Missiles								P-1 ITEM NOMENCLATURE AIM-9 Sidewinder Mods				
Program Element for Code B Items:								Other Related Program Elements 0207161N				
	Prior Years	ID Code		FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total
QUANTITY		B		63							0	63
COST (In Millions)	46.4			27.279	0.795	0.595					\$0.0	\$75.069
<p>The AIM-9 Sidewinder short-range air-to-air missile (SRM) is a launch and leave, air combat munitions that uses passive infrared (IR) energy for acquisition and tracking of enemy aircraft and complements the Advanced Medium Range Air-to-Air Missile. Air superiority in the SRM arena is essential and includes first shot, first kill opportunity against an enemy employing IR countermeasures.</p> <p>AIM-9X started production with FY 2001 funds. Modifications to the AIM-9M to incorporate changes to ensure compatibility with F/A-18E/F are funded in FY01 through FY03.</p> <p>FY 2001 Program Justification: Successful LRIP DAB Milestone Decision on 22 Sept 2000. LRIP I option was awarded Nov 2000.</p> <p>FY 2002 Program Justification: Correction of forward hangar failures between AIM-9M and F/A18 E/F.</p> <p>FY 2003 Program Justification: Correction of forward hangar failures between AIM-9M and F/A18 E/F.</p> <p>The total quantity of missiles produced will be a combination of All up Rounds (AUR) and Captive Air Training Missiles (CATM).</p>												

P-1 SHOPPING LIST

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P3A

INDIVIDUAL MODIFICATIONMODELS OF SYSTEM AFFECTED: AIM-9XTYPE MODIFICATION: Increased CapabilityMODIFICATION TITLE: AIM-9X Missile Modification

DESCRIPTION/JUSTIFICATION:

The AIM-9X (Sidewinder) short range air-to-air missile is a long-term evolution of the AIM-9 series of fielded missiles. The AIM-9X missile program provides a launch and leave, air combat munitions that uses passive infrared (IR) energy for acquisition and tracking of enemy aircraft and complements the Advanced Medium Range Air-to-Air Missile. Air superiority in the short-range air-to-air missile arena is essential and includes first shot, first kill opportunity against an enemy employing IR countermeasures. The AIM-9X employs several components common with the AIM-9M. Anti-Tamper features are being incorporated to protect improvements inherent in this design. The Air Force is procuring a total of 5,097 missiles of which 1,100 are Captive Air Training Missiles (CATMs).

NOTES:

1. The following notes apply to the Projected Financial Plan and Installation Schedule sections. ALL TOTALS INCLUDE ONLY FY01 AND PRIOR YEARS DATA.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

The program received DAB approval to enter into LRIP I on 8 Sept 00 with no comments. LRIP I contract was awarded in Nov 2000. The flight test program continues to demonstrate AIM-9X capabilities well beyond the fielded AIM-9M system.

The joint flight test program has completed 18 unguided and 19 guided launches proving capabilities well beyond the fielded AIM-9M system.

	FY 1998 & Prior		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		TC		TOTAL	
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E		127.8		57.0		39.465		23.801		16.257		1.957		0.716		1.142		1.254		1.288		0.000		270.7
PROCUREMENT																								
INSTALLATION KITS							63	16.800																16.800
INSTALLATION KITS - UNIT COST								0.267																
INSTALLATION KITS NONRECURRING								0.000																0.000
SPEC TOOLING/SPEC TEST EQUIP								1.100																1.100
ENGINEERING CHANGE ORDERS								0.800																0.800
DATA								0.100																0.100
GOVERNMENT IN-HOUSE								0.700																0.700
TRAINING EQUIPMENT								1.475																1.475
SUPPORT EQUIPMENT								3.300																3.300
OTHER PRODUCTION SUPPORT								1.100																1.100
ILS								1.300																1.300
INSTALL COST (INCLUDED IN INSTALLATION KITS (INCLUDES TEARDOWN, TEST AND SHIPPING)																								
TOTAL PROCUREMENT								26.675																26.675

FY95 and prior funded under P.E. 0603715D

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P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: AIM-9X MODIFICATION TITLE: AIM-9X MISSILE MODIFICATION

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: CONTRACTOR

ADMINISTRATIVE LEADTIME: 2 Weeks (Lots 1-3)*

CONTRACT DATES: FY 2000: Not Applicable

DELIVERY DATE: FY 2000:

PRODUCTION LEADTIME: 21 Months (Lot 1)

FY 2001: Nov 2000

FY 2001: Aug 2002

FY 2002: N/A

FY 2002: N/A

(\$ in Millions)

Cost:	Prior Years		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007			Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
PRIOR YEARS																							
FY 1999 EQUIPMENT																							
FY 2000 EQUIPMENT																							
FY 2001 EQUIPMENT																							
FY 2002 EQUIPMENT																							
FY 2003 EQUIPMENT																							
FY 2004 EQUIPMENT																							
FY 2005 EQUIPMENT																							
FY 2006 EQUIPMENT																							
FY 2007 EQUIPMENT																							
TO COMPLETE																							

INSTALLATION SCHEDULE:

		FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				FY 2006				FY 2007				TC	TOTAL
		& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4					
In	0	63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	63				
Out	0	0	0	0	0	0	0	0	8	19	24	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	63				

Input schedule: Delivery of components to the contractor for missiles (includes 15 CATMS). FY02 through FY07 are presented on the P21 exhibit for WPN AUR.

Output schedule: Delivery of missiles from the contractor (includes 15 CATMS). Deliveries reflect actual contract modification.

Input started in 1st qtr FY01 to allow for tear-down, inspections, and shipment of GFE components to the contractor.

P-3A

CLASSIFICATION: **UNCLASSIFIED**

P3A		INDIVIDUAL MODIFICATION	
MODELS OF SYSTEM AFFECTED:	<u>AIM-9M</u>	TYPE MODIFICATION:	<u>Reliability</u>
		MODIFICATION TITLE: <u>AIM-9M Missile Modification</u>	
<p>DESCRIPTION/JUSTIFICATION:</p> <p>During F/A-18E/F testing AIM-9M missiles experienced wing and forward hangar failures due to the F/A-18E/F dynamic wing tip environment. Modifications to the missile wing were developed and tested during F/A-18E/F EMD DT testing and were incorporated into the AIM-9M assets used during F/A-18E/F OPEVAL. Selected forward hangars were also used during F/A-18E/F EMD and OPEVAL but with flight hour limitations. For fleet use, new hangars manufactured with a new material will be used to provide the fleet with a hangar that does not require inspections.</p> <p>DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: N/A</p> <p>Notes: Modifications will be incorporated by Engineering Change Proposal (ECP) to the AIM-9M baseline. Funding is for 600 All Up Rounds and 150 CATMS and sequenced to cover F/A-18E/F deployments.</p> <p>Congressional notification of AIM-9M's modification (compatibility with F/A-18E/F) was submitted with an FY01 start.</p>			
	FY 1998 & Prior	FY 1999	FY 2000
	QTY \$	QTY \$	QTY \$
	FY 2001	FY 2002	FY 2003
	QTY \$	QTY \$	QTY \$
	FY 2004	FY 2005	FY 2006
	QTY \$	QTY \$	QTY \$
	FY 2007	TC	TOTAL
	QTY \$	QTY \$	QTY \$
FINANCIAL PLAN (IN MILLIONS)			
RDT&E			
PROCUREMENT			
HARDWARE			
INSTALLATION KITS - UNIT COST			
INSTALLATION KITS NONRECURRING			
SPEC TOOLING/SPEC TEST EQUIP			
ENGINEERING CHANGE ORDERS			
DATA			
GOVERNMENT IN-HOUSE			
TRAINING EQUIPMENT			
SUPPORT EQUIPMENT			
OTHER PRODUCTION SUPPORT			
ILS			
INSTALL COST (INCLUDED IN INSTALLATION KITS (INCLUDES TEARDOWN, TEST AND SHIPPING))			
TOTAL PROCUREMENT			

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BUDGET ITEM JUSTIFICATION SHEET P-40											DATE: February 2002	
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy								P-1 ITEM NOMENCLATURE HARM Mods - AGM-88C/D (Subhead: J2ES)				
Program Element for Code B Items: 2032700								Other Related Program Elements 0205601N				
	Prior Years	ID Code	FY 2000*	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Program
QUANTITY												0
COST (\$M)	\$89.0			\$0.0	\$0.0	\$5.0	\$8.0	\$8.2	\$33.1	\$44.1	\$510.7	\$698.1
Initial Spares (\$M)												\$0.0
Total (\$M)	\$89.0			\$0.0	\$0.0	\$5.0	\$8.0	\$8.2	\$33.1	\$44.1	\$510.7	\$698.1
Unit Cost (\$M)				0	0	0	0	0	0	0	0	

* Funding for FY00 was executed under Subhead Y2ES. Subhead J2ES will be effective beginning FY01 due to a program realignment from PEO(T) to PEO(W).

MISSION DESCRIPTION: The High Speed Anti-Radiation Missile (HARM) is a joint-service air-to-service missile designed to suppress or destroy land and sea based radars involved with enemy air defense systems. HARM is integrated on the F/A-18 and EA-6B aircraft. HARM weighs 807 lbs, is 164 inches long and 10 inches in diameter. HARM is a joint-service program with USN (lead), USAF, and FMS participation. The HARM was in full production from FY1982 through FY1996. The USN procured 8,654 all-up-round (AUR) HARMs and 551 Block IV missile modification kits with WPN funding. The last year of USN WPN funding was appropriated in FY94.

The HARM weapon was recently deployed in the North American Treaty Organization (NATO) military action in Kosovo and Iran, and was successfully utilized in Bosnia. HARM is the only missile that can successfully isolate and attack "Pop-up" and "Shoot and Scoot" anti-air defense systems, the HARM AGM-88C is the Fleet shooters weapon of choice. The current AGM-88C baseline offers greater capability against existing and advanced threats which includes capabilities to counter threats of high pulse densities, wider frequency agility (larger footprint), more complex wave patterns, and multiple engagement radars. The modification kits will include the improved Target Detector for better performance against advanced threats.

The HARM AGM-88D (Block VI)/Precision Navigation Unit (PNU) Upgrade Program is a tri-national cooperative program that will enable the fleet to maintain effectiveness against increasingly sophisticated, ground-based enemy radars. The Block VI/PNU consists of a tactical software upgrade in conjunction with a hardware upgrade which includes the installation of an Inertial Measurement Unit (IMU) coupled with a Global Positioning System (GPS) receiver to provide improved guidance capability to current domestic and international customer inventories.

P-1 SHOPPING LIST

CLASSIFICATION:

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P3A

INDIVIDUAL MODIFICATION

DESCRIPTION/JUSTIFICATION:

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

EMD Contract Award: JUL 03

<u>QTY</u>	<u>\$</u>	<u>QTY</u>	<u>\$</u>	<u>QTY</u>	<u>\$</u>
------------	-----------	------------	-----------	------------	-----------

	QTY	
\$		\$

[illegible]

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* Installation of the retrofit kits into missile control and guidance sections will be accomplished by Raytheon Systems Company (RSC). Field activity will perform All-Up-Round (AUR) breakdown/build-up.

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P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: AGM-88B

MODIFICATION TITLE: HARM Mods - AGM-88C/D (Subhead: J2ES)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Contractor Assembly at Plant

ADMINISTRATIVE LEADTIME: 6 Months

CONTRACT DATES: FY 2000: n.a.

DELIVERY DATE: FY 2000: n.a.

PRODUCTION LEADTIME: 12 Months

FY 2001: n.a.

FY 2002: n.a.

FY 2001: n.a.

FY 2002: n.a.

(\$ in Millions)

Cost:																						
PRIOR YEARS																						
FY 1999 EQUIPMENT																						
FY 2000 EQUIPMENT																						
FY 2001 EQUIPMENT																						
FY 2002 EQUIPMENT																						
FY 2003 EQUIPMENT																						
FY 2004 EQUIPMENT																						
FY 2005 EQUIPMENT																						
FY 2006 EQUIPMENT																						
FY 2007 EQUIPMENT																						
TO COMPLETE																						

INSTALLATION SCHEDULE:

	FY 2000 & Prior	FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				FY 2006				FY 2007			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
In	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
Out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60	0	0	0	0	0	0	0	0	0					

CLASSIFICATION:

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BUDGET ITEM JUSTIFICATION SHEET P-40											DATE: February 2002	
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy/BA-2						P-1 ITEM NOMENCLATURE STANDARD MISSILE MODIFICATION (A2FK) BLI:235600						
Program Element for Code B Items:						Other Related Program Elements						
	Prior Years	ID Code		FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Program
QUANTITY	387			80	58	90	84	95	95	95	116	1,100
COST (\$M)	\$194.2			\$49.0	\$35.1	\$56.2	\$53.7	\$60.3	\$61.5	\$62.7	\$76.1	\$648.9
Initial Spares (\$M)												\$0.0
<p>PROGRAM OVERVIEW: The Standard Missile Modification Program modifies SM-2 BLK II and III missiles into SM-2 BLK IIIB missiles. The program makes improvements in the operational readiness and electronic countermeasures performance of the missiles. These modifications are "turnkey" and do not involve separate install funding.</p>												

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WEAPONS SYSTEM COST ANALYSIS P-5						Weapon System							DATE: February 2002			
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy/BA-2						ID Code		P-1 ITEM NOMENCLATURE/SUBHEAD STANDARD MISSILE MODIFICATION (A2FK) BLI:235600								
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS													
			Prior Years	FY 2000			FY 2001			FY 2002			FY 2003			
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	
FK007	GC&A						80	428.43	34,274	58	424.57	24,625	90	439.87	39,588	
	MK 104 UPGRADE						80	46.35	3,708	58	45.73	2,652	90	47.30	4,257	
	MK 54 S&A DEVICE						80	9.69	775	58	9.83	570	90	10.17	915	
	MK 45 TDD MOD 9						80	104.91	8,393	58	104.91	6,085	90	106.63	9,597	
	MK 125						80	19.08	1,526	58	19.39	1,125	90	20.07	1,806	
	SM-1Blk V1B Mod Overrun								363							
			194,200						49,039			35,057			56,163	

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BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)					Weapon System		A. DATE February 2002			
B. APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy/BA-2					C. P-1 ITEM NOMENCLATURE STANDARD MISSILE MODIFICATION				SUBHEAD A2FK	
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
GC&A										
FY01	80	428.43	NAVSEA		SS/FFP/IF	RAYCO-TUCSON, AZ	03/01	01/03	YES	
FY02	58	424.57	NAVSEA		SS/FFP/IF	RAYCO-TUCSON, AZ	03/02	01/04	YES	
FY03	90	439.87	NAVSEA		SS/FFP/IF	RAYCO-TUCSON, AZ	01/03	01/05	YES	
MK 104 UPGRADE										
FY01	80	46.35	NAVSEA		SS/FFP/AF	ARC-CAMDEN, AR	03/01	10/02	YES	
FY02	58	45.73	NAVSEA		SS/FFP/AF	ARC-CAMDEN, AR	03/02	10/03	YES	
FY03	90	47.30	NAVSEA		SS/FFP/AF	ARC-CAMDEN, AR	03/03	10/04	YES	
MK 54 S&A DEVICE										
FY01	80	9.69	NAVSEA		SS/FFP	KAMAN- Middletown,CT	05/01	10/02	YES	
FY02	58	9.83	NAVSEA		SS/FFP	KAMAN- Middletown,CT	03/02	10/03	YES	
FY03	90	10.17	NAVSEA		SS/FFP	KAMAN- Middletown,CT	03/03	10/04	YES	
MK 45 TDD MOD 9										
FY01	80	104.91	NAVSEA		MYP/SS/FFP/AF	MOTOROLA-Scottsdale,AZ	03/01	10/02	YES	
FY02	58	104.91	NAVSEA		MYP/SS/FFP/AF	MOTOROLA-Scottsdale,AZ	03/02	10/03	YES	
FY03	90	106.63	NAVSEA		MYP/SS/FFP/AF	MOTOROLA-Scottsdale,AZ	03/03	10/04	YES	
MK 125										
FY01	80	19.08	NAVSEA		SS/FFP	AlliantTech-Magna,UT	09/01	10/02	YES	
FY02	58	19.39	NAVSEA		SS/FFP	AlliantTech-Magna,UT	04/02	10/03	YES	
FY03	90	20.07	NAVSEA		SS/FFP	AlliantTech-Magna,UT	04/03	10/04	YES	
D. REMARKS										

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P-1 SHOPPING LIST

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Classification:

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BUDGET ITEM JUSTIFICATION SHEET P-40								DATE: February 2002				
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy BA 2 - Other Missiles								P-1 ITEM NOMENCLATURE Weapons Industrial Facilities BLI: 242000				
Program Element for Code B Items:								Other Related Program Elements				
	Prior Years	ID Code		FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total
QUANTITY												
COST (In Millions)				\$29.1	\$35.9	\$17.7	\$7.8	\$4.3	\$4.3	\$4.4		

This item provides funding to:

- Close, deactivate, prepare for disposal, and convey the two Government-owned contractor-operated (GOCO), Naval Weapons Industrial Reserve Plants (NWIRPs) under the cognizance of NAVAIR supported by WPN funds. The two facilities are NWIRP, McGregor TX and NWIRP, Toledo OH. Closure and deactivation is being accomplished in accordance with 41 CFR, Chapter 101, Federal Property Management Regulations, and other applicable guidance. Upon completion of divestiture there will no longer be a requirement to fund these facilities.
- Accomplish environmental remediation as required by law in accordance with Section 120(h) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and Executive Order 12898, Environmental Justice. CERCLA 120(h) requires assurance of environmental contamination remediation prior to disposal of Government real property. This assurance is provided by following guidance promulgated by ASSTSECNAV (I&E) memo of 22 December 1993, Application of BRAC Environmental Procedures to Non-BRAC Identification of Uncontaminated Property and Cleanup of Contaminated Property at Closing Installations
- Develop Environmental Impact Statements (EISs) and conduct Cultural Resource Surveys as required by law. The EISs and Cultural Resource Surveys must be accomplished in accordance with 40 CFR, the National Environmental Policy Act (NEPA) and other applicable guidance. The NEPA process is required for any major Federal action affecting the environment. Application to GOCO divestitures was confirmed by NAVAIR Counsel in letter serial AIR-7.7.4/REC of 3 April 95, which based its conclusion on OPNAVINST 5090.1B, the Defense Authorization Acts of 1994 and 1995, and case law.
- Dispose of the facilities as required by law. NWIRP, McGregor TX is being accomplished in accordance with Section 2868, Land Conveyance, NWIRP, McGregor, TX of Public Law 104-106, National Defense Authorization Act for FY-1996. The mandatory divestiture of NWIRP, Toledo OH will be accomplished in accordance with ASSTSECNAV (RD&A) memo of 7 July 1995, 41 CFR, Chapter 101, Federal Property Management Regulations and other applicable guidance.
- Accomplish explosive decontamination of NWIRP, McGregor TX in accordance with AMCCOMR 385-2, Decontamination and Disposal of Facilities, Equipment and Material and other applicable guidance prior to transfer of the facility to the city of McGregor as required by law.

Funding also supports Capital Type Rehabilitation projects, at Government-owned contractor operated (GOCO) plants under the cognizance of NAVSEA, for weapons systems such as Sparrow, Sea Sparrow, Hawk, Standard, Sidewinder, VLS and Mark 45 Gun Mounts, Phalanx, and rocket motors. Federal Acquisition Regulation Part 52.245-7 specifies that Facilities Use contracts require that the government fund capital type rehabilitation projects to support and maintain these facilities. These plants have an average age of 45 years and lack of proper maintenance will limit capabilities to maintain scheduled production rates and overall productivity. Funding is separated to reflect environmental, safety, major repair, energy conservation and facilities restoration.

(CONTINUED ON PAGE 2 OF 2)

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BUDGET ITEM JUSTIFICATION SHEET P-40								DATE: February 2002				
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy BA 2 - Other Missiles							P-1 ITEM NOMENCLATURE Weapons Industrial Facilities (BLI 242000)					
Program Element for Code B Items:							Other Related Program Elements					
	Prior Years	ID Code		FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total
QUANTITY												
COST (In Millions)				\$29.1	\$35.9	\$17.7	\$7.8	\$4.3	\$4.3	\$4.4		
(CONTINUED FROM PAGE 1 of 2) - ENVIRONMENTAL: Provides funds to eliminate environmental deficiencies in compliance with local, state, and federal regulations. These regulations mandate requirements which must be met if plant shutdowns, criminal liability, and severe financial penalties are to be avoided. - SAFETY: Provides funds to eliminate safety deficiencies in compliance with local, state, and federal OSHA regulations. These regulations mandate requirements which must be met if plant shutdowns and severe financial penalties are to be avoided. - MAJOR REPAIR: Provides funds for critical upgrades to maintain high liability areas such as fire and security systems, roofs, boilers, electrical distribution systems, bridge crane systems, and other structural repairs essential to maintain the industrial integrity of the plant. - ENERGY CONSERVATION: Provides funds to decrease energy consumption by installing new energy efficient systems and provides increased maintenance on these systems. Mandated in 1993 by Congress (Defense Appropriations Committee). - FACILITIES RESTORATION: Provides funds for replacement of Weapons Industrial Facilities that have exceeded their useful life and deteriorated beyond safe operations.												

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WEAPONS SYSTEM COST ANALYSIS P-5						Weapon System								DATE: February 2002	
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy/BA-2						ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD 37073 Weapons Industrial Facilities BLI: 242000								
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS												
			Prior Years	FY 2001			FY 2002			FY 2003					
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost			
FU002	Capital Type Rehabilitation														
	Environmental					3,211			2,753			3,065			
	Safety								0			0			
	Energy Conservation					1,376			918			1,023			
	Major Repairs								0						
FU005	Facilities Restoration (ABL)					21,075			28,769			9,959			
FU020	Government-Owned Contractor-Operated Facilities Divestiture		82,022												
	NWIRP McGregor					3,146			3,033			3,035			
	NWIRP Toledo					278			470			580			
			82,022			29,086			35,943			17,662			

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P-1 SHOPPING LIST

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BUDGET ITEM JUSTIFICATION SHEET (Total Cost in Millions \$)							DATE February 2002			
APPROPRIATION/BUDGET ACTIVITY WP,N - BA2 OTHER MISSILES					P-1 ITEM NOMENCLATURE Fleet Satellite Communications Follow-On 2433				SUBHEAD 52EU	
	PY	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	TO COMP	TOTAL
QUANTITY										
COST (in millions)		\$94.7	\$77.2	\$0.0	\$31.2	\$534.9	\$573.9	\$606.2	TBD	TBD
<p>PROGRAM COVERAGE: The Ultra High Frequency (UHF) Follow-On communications satellite constellation satisfies DoD worldwide UHF communications requirements. The current constellation is expected to drop below the required availability of 70% by 2003. The funding in this line will provide for the procurement of one satellite (F11) and subsequent launch in 2003 to maintain availability of the UFO constellation.</p> <p>F11 is procured as an option to the existing Boeing contract. The current level of funding provides for UHF payload with a new digital receiver (new receiver necessary due to parts obsolescence).</p> <p>FY01 funding of \$94.7M provides for the F11 satellite and FY02 funding of \$77.2M provides for F11 launch services.</p>										

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COST ANALYSIS								DATE February 2002					
APPROPRIATION ACTIVITY WP,N - BA-2 OTHER MISSILES					P-1 ITEM NOMENCLATURE Fleet Satellite Communications Follow-On 2433					SUBHEAD 52EU			
COST CODE	ELEMENT OF COST	ID CODE	TOTAL COST IN THOUSANDS OF DOLLARS										
			PY			FY 2001		FY 2002			FY 2003		
			TOTAL COST	QTY	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
4200	Satellite Procurement				1	93,500	93,500						
4300	Launch Services										76,190		
4400	Production Support						1,160				997		
	Total Control						94,660				77,187		
Remarks:	FY01 funding of \$94.7M provides for the F11 satellite and FY02 funding of \$77.2M provides for F11 launch services.												

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PROCUREMENT HISTORY AND PLANNING										A. DATE February 2002		
B. APPROPRIATION/BUDGET ACTIVITY WP,N - BA2 OTHER MISSILES						C. P-1 ITEM NOMENCLATURE Fleet Satellite Communications Follow-On 2433				SUBHEAD 52EU		
COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST Delevery	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
4200	Satellite Procurement	01	Boeing Satellite Systems Inc	SS/FFP	SPAWAR	Aug-98	Dec-00	Dec-03	1	93,500	Yes	N/A
D. REMARKS												

CLASSIFICATION:

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BUDGET ITEM JUSTIFICATION SHEET P-40											DATE: February 2002	
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy/Torpedoes & Related Equipment, BA-3							P-1 ITEM NOMENCLATURE ASW TARGETS LI#314100					
Program Element for Code B Items: 0204229N							Other Related Program Elements					
	Prior Years	ID Code		FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Program
QTY MODS MK-39/1	N/A	A		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
QTY MODS MK-30/2	N/A	B		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
COST (\$M)	\$0.0			\$3.1	\$15.2	\$14.3	\$26.3	\$29.1	\$29.6	\$30.0	Cont.	Cont.
Initial Spares (\$M)	\$0.0			\$0.8	\$0.5	\$0.6	\$1.1	\$1.0	\$1.0	\$1.0	Cont.	Cont.
TOTAL (\$M)	\$0.0			\$3.9	\$15.7	\$14.9	\$27.4	\$30.1	\$30.6	\$31.0	Cont.	Cont.
Unit Cost (\$M)												
<p>ITEM DESCRIPTION/JUSTIFICATION:</p> <p>This line item includes two distinct systems : (a) MK 39 Mod 1 (Cost Codes TG002, TG832, TG842, TG852, TG862 and TG900) and (b) MK30 Mod 2 (Cost Codes TG005, TG015, TG835, TG865 , TG875, TG885, TG900 and TG905).</p> <p>The MK 39 Mod 1 Expendable Mobile ASW Training Target (EMATT) is a small self-propelled underwater vehicle launchable from fixed wing and rotary wing ASW aircraft and ASW surface ships for the purpose of providing basic, open ocean sonar training and MK 46, MK 48, ADCAP and MK 50 placement exercises. Its operation consists of a dynamic run trajectory that is actively controlled in depth and course with pre-programmable run maneuvers and is capable of generating a magnetic field (anomaly) detectable by all current Navy Magnetic Anomaly Detectors (MAD).</p> <p>The MK 30 Mod 2 is the next generation fleet ASW training target for training the Navy surface ship, submarines and aircraft that will be capable of simulating the Russian and Rest of the World (ROW) submarine threats anticipated in the twenty-first century littoral warfare environment. Replacing the aging MK 30 Mod 1 target, MK 30 Mod 2 will be a highly reliable and maintainable unmanned undersea vehicle simulating the dynamics, acoustics and magnetic signature of submarines and act as a target for ASW sensors and torpedoes to detect, classify, track and pursue in a realistic training environment.</p>												

P-1 SHOPPING LIST

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BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)					Weapon System		A. DATE February 2002			
B. APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy BA-3:Torpedo and Related Equipment					C. P-1 ITEM NOMENCLATURE ASW Targets				SUBHEAD 73TG	
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
FY2001						Marion, MA				
MK39 Mod 1 - EMATT/ECPs	335	3.83	NAVSEA	N/A	C/FFP-Option	Sippican, Inc. Marion, MA	Feb-01	Nov-01	Yes	NA
MK30 Mod 2	2	230	NAVSEA	Jan-00	C/FFP	Raytheon Portsmouth, RI	Oct-01	Nov-02	Yes	NA
FY2002										
MK39 Mod 2 - EMATT/ECPs	500	4.37	NAVSEA	Jan-01	C/FFP	TBD	Mar-02	May 03	Yes	NA
MK30 Mod 2	3	2,911	NAVSEA	NA	C/FFP	Raytheon Portsmouth, RI	Feb-02	Aug-03	Yes	NA
FY2003										
MK39 Mod 2 - EMATT/ECPs	500	4.39	NAVSEA	N/A	C/FFP-Option	TBD	Feb-03	Apr-04	Yes	NA
MK30 Mod 2	3	2,955	NAVSEA	NA	C/FFP-Option	Raytheon Portsmouth, RI	Nov-02	May-04	Yes	NA
D. REMARKS										

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BUDGET ITEM JUSTIFICATION SHEET P-40											DATE: February 2002	
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy/ Torpedoes & Related Equipment, BA-3							P-1 ITEM NOMENCLATURE Torpedo MK46 Mods/MK54 Mod 0, H3F5, LI# 321500					
Program Element for Code B Items: 0204228N							Other Related Program Elements 0604610N Lightweight Torpedo Development					
	Prior Years	ID Code	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007		To Complete	Total* Program
QUANTITY		B	0	0	44	50	70	381	351		87	1,000
COST (\$M)			\$7.0	9.9**	\$38.8	\$35.5	\$55.8	\$113.8	\$117.8		\$67.8	\$474.9
Initial Spares (\$M)			\$0.7	\$0.7	\$1.3	\$1.1	\$1.1	\$0.9	\$0.9			
<p>ITEM DESCRIPTION/JUSTIFICATION:</p> <p>The MK46 is an in-service lightweight torpedo designed for launch from surface vessel torpedo tubes, VLA, and fixed/rotary wing aircraft. The Lightweight Hybrid Torpedo (LHT) MK54 Mod 0, is a modular evolution building from the MK46 and MK50 torpedo. It is comprised of the MK50 sonar, MK46 warhead and propulsion system and new COTS processors which will use tactical software derived from MK50 and MK48 ADCAP. The LHT will provide improved performance against diesel electric submarine threats operating in shallow water. The LHT LRIP contract was awarded in Dec 99 to Raytheon Systems Company.</p> <p>The total Lightweight torpedo inventory is composed of a mix of MK46 5A(S), MK46 5A(SW), MK50, and MK54.</p> <p>Performance Spec Milestone: June 1996</p> <p>Technical Data Package: March 2002</p> <p>DTE: July 1999 - September 2002</p> <p>OPEVAL: October 2002-January 2003</p> <p>*Includes 17 MK54 Units and \$28.5M in Prior Year Funds</p> <p>** 2.5M was added to the Ordnance Support line item by Congress for increased MK-54 torpedo procurement; this add is reflected in the MK-46 Torpedo Mods line item, where the MK-54 torpedo is procured.</p>												

P-1 SHOPPING LIST

CLASSIFICATION:

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CLASSIFICATION: **UNCLASSIFIED**

WEAPONS SYSTEM COST ANALYSIS P-5		Weapon System		DATE: February 2002
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy/ Torpedoes & Related Equipment, BA-3		ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD Torpedo MK46 Mods/MK54 /Mod 0, H3F5, LI# 321500	

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS											
			FY 2001 **			FY 2002 **			FY 2003					
			Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost			
F5103	SLEP (FY00 Assembly)	A												
F5104	Hardware	B	0	0	2,098	0	0	2,679	44	583	25,657			
F5105	Fleet Exercise Systems				0			2,000			0			
F5106	Platform Integration													
F5107	MK54/VLA Flight &Integration													
F5003	Support Equipment				284			598			2,100			
F5830	Production Engineering-In-house				4,089			3,997			2,807			
F5860	Accept. Test & Evaluation				0			0			7,316			
F5900	Production Engineering-Contractor				570			587			903			
					7,041			9,861			38,783			

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** No LWT procurement in FY01 and FY02. Funding for TI and engineering services.

CLASSIFICATION:

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WEAPONS SYSTEM COST ANALYSIS P-5								Weapon System						DATE: February 2002				
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy/Torpedoes & Related Equipment, BA-3								ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD Torpedo MK46 Mods/MK54 Mod 0, H3F5, LI# 321500									
COST CODE	ELEMENT OF COST																	
		FY 2004			FY 2005			FY 2006			FY 2007			To Complete		Total		
		Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Cost	Quantity	Cost	
F5103	SLEP (FY00 Assembly)																1,561	
F5104	Hardware	50	497	24,836	70	564	39,503	381	235	89,599	351	256	89,736	87	46,127	1,000	332,794	
F5105	Fleet Exercise Systems			450			460			1,174			1,200		904		7,287	
F5106	MK54 Platform Integration																705	
F5107	MK54/VLA Flight & Integration																508	
F5003	Support Equipment			496			4,894			4,674			2,871		541		20,086	
F5830	Production Engineering-In-house			2,869			3,022			3,084			3,062		8,778		33,838	
F5860	Accept. Test & Evaluation			5,968			7,009			14,360			20,051		10,511		71,191	
F5900	Production Engineering-Contractor			915			890			884			877		896		6,872	

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CLASSIFICATION:

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CLASSIFICATION:

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BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)					Weapon System		A. DATE February 2002			
B. APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy					C. P-1 ITEM NOMENCLATURE Torpedo MK46 Mods/MK54 Mod 0, H3F5, LI# 321500				SUBHEAD H3F5	
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
MK 54 Mod 0/ 2000	17	743	NAVSEA	Nov-99	SS/FP	Raytheon	Dec-99	Apr-01		
MK 54 Mod 0/ 2003	44	583	NAVSEA	May-02	C/FP	TBD	Dec-02	Jul-04		
D. REMARKS										

CLASSIFICATION:
UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET P-40										DATE: February 2002	
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy/BA-3 Torpedo and Related Equipmen						P-1 ITEM NOMENCLATURE MK 48 ADCAP MODS Torpedo BLI: 322500 SBHD: H3D1					
Program Element for Code B Items: 0204284N						Other Related Program Elements RDT&E					
		ID Code	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Program
QUANTITY MODS		A	50	35	90	100	96			0	371
QUANTITY CBASS		B	0	0	0	15	79	181	190	798	1,263
COST (\$M)			\$42.9	\$42.0	\$62.1	\$68.3	\$91.9	\$89.0	\$77.3	\$497.9	\$971.4
Initial Spares (\$M)			\$2.9	\$3.2	\$3.1	\$3.5	\$3.6	\$4.0	\$4.6		
<p>ITEM DESCRIPTION/JUSTIFICATION:</p> <p>This line item procures Modification Kits for the MK48 ADCAP Torpedo. The MK48 ADCAP MODS program incorporates both a Guidance and Control (G&C) modification and a Torpedo Propulsion Upgrade (TPU) modification to the baseline ADCAP system.</p> <p>The G&C Modification addresses the need to increase memory and processing capacity of the G&C hardware and to replace obsolete and sunset technology electronic component parts. The increased capacity is required for future advanced signal processing techniques that will be needed for performance upgrades in shallow water target detection/classification. The TPU addresses the Navy's operational requirement for a quieter ADCAP torpedo. These modifications will allow the MK48 ADCAP torpedo to operate effectively in adverse environments, thus enabling the MK48 ADCAP torpedo to counter enemy submarine threats into the 21st century.</p> <p>MODS procurement quantities have been adjusted to resolve a parts obsolescence issue that affected the MOD 6 procurements. FY01 quantity is reduced to offset Production Engineering Change Proposal necessary to correct the parts obsolescence issue.</p> <p>FY00 (Production 5) contract was awarded April 00 to Raytheon Systems Corporation, base year (FY00) with three option years (FY01-FY03).</p> <p>The Common Broadband Advanced Sonar System (CBASS), starting in FY04 with the purchase of 15 LRIP units, will incorporate into the ADCAP MODs torpedo a new wide band sonar system and software algorithms. These new elements will provide the capability to transmit and receive over a wide frequency band to take advantage of broadband signal processing techniques. These improvements are necessary to overcome current and future improvements in advanced threat countermeasures capabilities. In FY06, 175 of the 181 CBASS units will also include the procurement of a Torpedo Propulsion Upgrade, in order to exhaust all MOD 5s currently in inventory. This results in a higher unit cost in that year.</p>											

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CLASSIFICATION:

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WEAPONS SYSTEM COST ANALYSIS P-5						Weapon System						DATE: February 2002			
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy BA-3 Torpedo and Related Equipment						ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD MK 48 ADCAP MODS Torpedo BLI: 322500 SBHD: H3D1								
COST CODE	ELEMENT OF COST	ID Code													
						FY 2001			FY 2002			FY 2003			
						Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	
D1001	<u>ADCAP MODS CBASS (Contractor, Installation, ECP, TI)</u>	A				50	361	18,044	35	452	15,830	90	334	30,095	
D1003	<u>Support and Ancillary Equipment</u>							2,130			2,977			9,062	
D1830	<u>Production Engineering (Contractor and In House)</u>							11,266			12,523			11,954	
D1860	<u>Acceptance T&E (Contractor and In House)</u>							11,442			10,701			11,013	
								42,882			42,031			62,124	

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BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)					Weapon System		A. DATE February 2002			
B. APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy BA-3 Torpedo and Related Equipment					C. P-1 ITEM NOMENCLATURE MK 48 ADCAP MODS Torpedo BLI: 322500				SUBHEAD H3D1	
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
FY01 MK48 MOD6	50	361	NAVSEA	N/A	C/FP (option)	Raytheon Systems Corporation	1/01	6/02		
FY02 MK48 MOD6	35	452	NAVSEA	N/A	C/FP (option)	Raytheon Systems Corporation	11/01	8/03		
FY03 MK48 MOD6	90	334	NAVSEA	N/A	C/FP (option)	Raytheon Systems Corporation	1/03	6/04		
D. REMARKS Unit cost reflected in this budget includes install cost from prior year buys. The quantity installed in any given year is different from the procurement quantity.										

CLASSIFICATION:

UNCLASSIFIED**BUDGET ITEM JUSTIFICATION SHEET****P-40**

DATE:

February 2002

APPROPRIATION/BUDGET ACTIVITY

Weapons Procurement, Navy BA-3: Torpedoes and Related Equipment

P-1 ITEM NOMENCLATURE

QUICKSTRIKE/323100/73QS

Program Element for Code B Items:

Other Related Program Elements

204304N

	Prior Years	ID Code		FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Program
QUANTITY												
COST (\$M)	N/A	A		\$1.9	\$3.9	\$2.0	\$3.4	\$3.2	\$3.2	\$3.3	CONT.	CONT.
Initial Spares (\$M)	N/A	A		\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	CONT.	CONT.

PROGRAM DESCRIPTION/JUSTIFICATION:

The QUICKSTRIKE family of mines consists of the MK-62 and MK-63 (500 lb. and 1000 lb. Mines) based on MK-82 and MK-83 general purpose bombs respectively, and the MK-65 (2000 lb.) mine. The Mod 0, 1, and 3 variants utilize various target detection devices (TDD). QUICKSTRIKE Mod 3 utilizes a newly developed TDD, MK-71. The MK-71 is a software-programmable device that is capable of being programmed to optimize detection of new threats. The QS Mod 3 consists of Target Detection Devices (including the service and dummy MK-71), Safe/Arming devices (including the service MK 75, practice MK 81, and dummy MK 84), and battery (including the MK 176). Additional support hardware include Test Sets MK-650 and MK-11, Adapters MK 157 and MK 163, and miscellaneous parts kits.

Note: FY02 funding for Target Detection Device includes non-recurring costs for production line startup, 5 first article units, and first article testing.

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CLASSIFICATION:

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DATE:

APPROPRIATION/BUDGET ACTIVITY

Weapons Procurement, Navy, BA-3: Torpedoes and Related Equipment

Procurement Items	ID Code	Prior Years		FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total
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CLASSIFICATION:

UNCLASSIFIED**BUDGET ITEM JUSTIFICATION SHEET****P-40****DATE:****February 2002**

APPROPRIATION/BUDGET ACTIVITY

Weapons Procurement, Navy/BA-3 Torpedo and Related Equipment

P-1 ITEM NOMENCLATURE

Torpedo Support Equipment BLI: 330100 SBHD: H3F8

Program Element for Code B Items:

Other Related Program Elements

		ID Code		FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Program
QUANTITY												
COST (\$M)				\$23.4	\$29.8	\$25.1	\$26.2	\$24.8	\$25.1	\$25.5	CONT.	CONT.
Initial Spares (\$M)												

The Torpedo Support Equipment account procures various torpedo components required to ready weapons for Surface Ships, Sub-Surface, Fixed Wing, and Rotary to achieve and maintain a readiness posture sufficient to counter the enemy sub-surface threat. The objective of this line is to provide the Fleet with ready exercise weapons for conducting training maneuvers which involve actually firing the torpedoes, and to maintain warshot inventories in an operational ready-for-issue status in support of combat ready deployment by anti-submarine warfare forces. After a torpedo is fired during a training exercise it is recovered and all expendable components such as batteries, cables, igniters (as well as various accessories required for air-launched torpedoes), must be replaced. These items as well as components such as exercise heads, fuel tanks, and exhaust valves which may be used more than onetime, but which are worn out or lost in service, are procured each fiscal year in quantities dependent upon the Fleet training requirements and tempo of operations. The torpedoes requiring support are the MK46 Mod 5A(S), MK46 Mod 5A(SW), MK 48 Mod 4, 5, and 6, MK 50, MK 54 and their associated Support and Test Equipment (S&TE). This equipment includes the following: lead droppers, seawater batteries, pressure cylinders, REXTORP kits, sway brace pads, suspension bands, thermal batteries, boiler assemblies, stop squibs, shutdown valves, gas injection assemblies, tailnuts, air stabilizers, wire coils, flex hoses, otto fuel, igniters, propellant, umbilical cables, and containers. In addition to components procurement, this account provides for production support and test/evaluation for these components and procurement of product improvement hardware and related equipment.

P-1 SHOPPING LIST

CLASSIFICATION:

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CLASSIFICATION: **UNCLASSIFIED**

WEAPONS SYSTEM COST ANALYSIS P-5							Weapon System							DATE: February 2002		
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy BA-3 Torpedo and Other Related Equipment							ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD Torpedo Support Equipment BLI: 330100 SBHD: H3F8								
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS													
			Prior Years	FY 2001			FY 2002			FY 2003						
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	
F8001	Lightweight Support Equipment					915			6,444			2,864				
F8002	Other Equipment Investment					3,389			3,628			1,249				
F8830	Production Engineering - In House					1,512			1,448			1,396				
F8840	Quality Assurance					170			70			102				
F8860	Acceptance T & E					1,172			1,601			337				
F8900	Production Engineering - Contractor					172			176			135				
Total	Lightweight Total					7,330			13,367			6,083				
F8100	Exercise and Expendables and Component Replacement						5,884			6,933			8,232			
F8101	Other Equipment Investment						7,445			6,894			8,032			
F8833	Production Engineering (In-house)						1,413			1,267			1,425			
F8843	Quality Assurance					361			398			621				
F8863	Acceptance Test and Evaluation					271			214			214				
F8893	Production Engineering - Contractor					700			700			525				
Total	Heavyweight Total					16,074			16,406			19,049				
							23,404			29,773			25,132			

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WEAPONS SYSTEM COST ANALYSIS P-5							Weapon System							DATE: February 2002				
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy BA-3 Torpedo and Other Related Equipment							ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD Torpedo Support Equipment BLI: 330100 SBHD: H3F8										
COST CODE	ELEMENT OF COST																	
		FY 2004			FY 2005			FY 2006			FY 2007			To Complete		Total		
		Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Cost	Quantity	Cost	
F8001	Lightweight Support Equipment			3,284			2,638			2,420			2,448					
F8002	Other Equipment Investment			1,731			1,224			1,130			1,159					
F8830	Production Engineering - In House			1,093			1,113			1,120			1,142					
F8840	Quality Assurance			103			104			105			70					
F8860	Acceptance T & E			339			236			237			238					
F8900	Production Engineering - Contractor			137			140			142			145					
Total	Lightweight Total			6,687			5,455			5,154			5,202					
F8100	Exercise and Expendables and Component Replacement			9,034			8,870			9,490			10,422					
F8101	Other Equipment Investment			7,436			7,261			7,320			6,870					
F8833	Production Engineering (In-house)			1,650			1,688			1,523			1,531					
F8843	Quality Assurance			705			656			737			656					
F8863	Acceptance Test and Evaluation			214			342			334			336					
F8893	Production Engineering - Contractor			521			518			514			510					
Total	Heavyweight Total			19,560			19,335			19,918			20,325					
				26,247			24,790			25,072			25,527					

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CLASSIFICATION:

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)					Weapon System			A. DATE February 2002		
B. APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy BA-3 Torpedo Support Equipment					C. P-1 ITEM NOMENCLATURE Torpedo Support Equipment				SUBHEAD H3F8	
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
FY2001										
MK46 Mod 5 Seawater Battery	723	0.350	NUWC, Keyport	Option	RC/FFP	Magnavolt, Clayton, NC	5/01	4/02	Yes	
MK46 Pressure Cylinder (Short)	200	0.215	NUWC, Keyport	Option	RC/FFP	Cartridge Actuated Devices, Farifield NJ	4/01	1/02	Yes	
MK46 Pressure Cylinder (Long)	370	0.250	NUWC, Keyport	4/01	RC/FFP	Cartridge Actuated Devices, Farifield NJ	7/01	4/02	Yes	
MK50 MK33 Air Stabilizer	175	2.200	NUWC, Keyport	4/01	RC/FFP	Paranetics Technology Inc, San Diego, CA	7/01	4/02	Yes	
MK50 REXTORP Kit	500	0.050	NUWC, Keyport	4/01	RC/FFP	Team Keyport Services, Poulsbo WA	4/01	8/01	Yes	
MK46 REXTORP Kit	1228	0.050	NUWC, Keyport	4/01	RC/FFP	Team Keyport Services, Poulsbo WA	4/01	8/01	Yes	
MK46 Fuel Shutoff Valve	182	0.300	NUWC, Keyport	5/01	RC/FFP	Cartridge Actuated Devices, Farifield NJ	7/01	3/02	Yes	
Torpedo Wire Coil	611	2.675	NUWC, Keyport	Option	RC/FFP	Entwistle, Hudson, MA	3/01	12/01	Yes	
Sub Wire Coil	800	1.940	NUWC, Keyport	Option	RC/FFP	Entwistle, Hudson, MA	3/01	3/02	Yes	
Otto Fuel	255	8.600	NSWC Indian Head	Option	WR	NSWC Indian Head, MD	11/00	1/01	Yes	
MK62-1 A-Cable Recepticle	301	0.956	NUWC, Keyport	Option	RC/FFP	Quantic, Hollister, CA	2/01	5/02	Yes	
MK62-1 A-Cable Insert	600	0.216	NUWC, Keyport	Option	RC/FFP	G & H Technology	2/01	10/01	Yes	
MK62-1 A-Cable Insert	400	0.216	NUWC, Keyport	3/01	RC/FFP	General Reliance Inc., Denville NJ	5/01	4/02	Yes	
FY2002										
MK78 Mod 1 Suspension Band	680	0.500	NUWC, Keyport	11/01	RC/FFP	Unknown	3/02	10/02	Yes	
MK46 Pressure Cylinder (Long)	370	0.250	NUWC, Keyport	9/01	RC/FFP	Unknown	3/02	11/02	Yes	
MK46 MK31 Air Stabilizer	400	0.800	NUWC, Keyport	11/01	RC/FFP	Unknown	3/02	7/02	Yes	
MK46 REXTORP Kits	200	0.100	NUWC, Keyport	Option	RC/FFP	Team Keyport Services, Poulsbo WA	1/02	5/02	Yes	
MK50 Thermal Battery	129	1.794	NUWC, Keyport	Option	RC/FFP	Aerospatiale Batteries, France	3/02	10/02	Yes	
Universal Container	111	3.600	NAVSEA	1/02	PR/FFP	Unknown	3/02	10/02	Yes	
MK50 MEL Boiler	180	28.000	NAVSEA	8/01	PR/FFP	Hamilton Sundstrand, Rockford IL	3/02	10/02	Yes	
Torpedo Wire Coil	690	2.900	NUWC, Keyport	11/01	RC/FFP	Unknown	3/02	1/03	Yes	
Sub Wire Coil	600	2.018	NUWC, Keyport	Option	RC/FFP	Entwistle, Hudson, MA	3/02	1/03	Yes	
Flex Hose (Improved)	649	1.080	NUWC, Keyport	Option	RC/FFP	Cortland Cable Co, Cortland, NY	3/02	8/02	Yes	
Igniter	200	0.220	NUWC, Keyport	Option	RC/FFP	Quantic, Hollister, CA	3/02	11/02	Yes	
Otto Fuel	140	17.470	NSWC Indian Head	Option	WR	NSWC Indian Head, MD	1/02	2/02	Yes	
MK62-1 A-Cable Recepticle	500	1.000	NUWC, Keyport	11/01	RC/FFP	Unknown	3/02	11/02	Yes	
MK62-1 A-Cable Insert	296	0.100	NUWC, Keyport	Option	RC/FFP	General Reliance Inc., Denville NJ	3/02	11/02	Yes	
D. REMARKS										

UNCLASSIFIED

CLASSIFICATION:

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)						Weapon System		A. DATE		
B. APPROPRIATION/BUDGET ACTIVITY						C. P-1 ITEM NOMENCLATURE			SUBHEAD	
Weapons Procurement, Navy						Torpedo Support Equipment			H3F8	
BA-3 Torpedo Support Equipment										
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
FY2003										
MK46 Mod 5 Seawater Battery	350	0.315	NUWC, Keyport	Option	RC/FFP	Magnavolt, Clayton, NC	3/03	3/04	Yes	
MK78 Mod 1 Suspension Band	735	0.525	NUWC, Keyport	Option	RC/FFP	Unknown	3/03	11/03	Yes	
MK46 Pressure Cylinder (Long)	335	0.275	NUWC, Keyport	Option	RC/FFP	Unknown	3/03	10/03	Yes	
MK46 MK31 Air Stabilizer	400	0.800	NUWC, Keyport	Option	RC/FFP	Unknown	3/03	10/03	Yes	
MK50 MK33 Air Stabilizer	175	2.300	NUWC, Keyport	Option	RC/FFP	Paranetics Technology Inc, San Diego, CA	3/03	10/03	Yes	
MK50 REXTORP Kit	300	0.100	NUWC, Keyport	11/02	RC/FFP	Unknown	3/03	8/03	Yes	
MK46 REXTORP Kit	200	0.100	NUWC, Keyport	11/02	RC/FFP	Unknown	3/03	8/03	Yes	
Universal Container	111	3.600	NAVSEA	11/02	PR/FFP	Unknown	3/03	9/04	No	
Universal REXTORP	74	14.857	NAVSEA	11/02	PR/FFP	Unknown	3/03	9/04	No	
Torpedo Wire Coil	952	2.950	NUWC, Keyport	Option	RC/FFP	Unknown	3/03	12/03	Yes	
Sub Wire Coil	800	2.058	NUWC, Keyport	11/02	RC/FFP	Unknown	3/03	11/03	Yes	
Flex Hose (Improved)	800	1.036	NUWC, Keyport	Option	RC/FFP	Cortland Cable Co, Cortland, NY	3/03	10/03	Yes	
Otto Fuel	140	18.510	NSWC Indian Head	Option	WR	NSWC Indian Head, MD	1/03	2/03	Yes	
Igniter	600	0.228	NUWC, Keyport	11/02	RC/FFP	Unknown	3/03	11/03	Yes	
MK62-1 A-Cable Recepticle	120	1.000	NUWC, Keyport	Option	RC/FFP	Unknown	3/03	11/03	Yes	
MK62-1 A-Cable Insert	1000	0.100	NUWC, Keyport	Option	RC/FFP	General Reliance Inc., Denville NJ	3/03	11/03	Yes	
D. REMARKS										

CLASSIFICATION:

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BUDGET ITEM JUSTIFICATION SHEET P-40											DATE: February 2002	
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy BA 3 - Torpedoes and Related Equipment							P-1 ITEM NOMENCLATURE ASW Range Support BLI: 330200 SBHD: 83F4/73F4					
Program Element for Code B Items:							Other Related Program Elements					
	Prior Years	ID Code		FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Program
QUANTITY												
COST (\$M)				\$ 18.7	\$ 18.2	\$14.5	\$ 13.8	\$ 13.8	\$ 14.0	\$ 14.3	Continuing	Continuing
Initial Spares (\$M)												
<p>The ASW Range support program provides training range equipment, weapon proofing range equipment, and Fleet support equipment for use on the Navy's underwater ranges. This equipment is used to instrument Fleet exercises and torpedo firings, ASW readiness assessment and ASW weapon production acceptance testing. The Weapon Fleet training ranges supported are Southern California Offshore Range (SCORE), Barking Sands Tactical Underwater Range/Barking Sands Underwater Range Extension (BARSTUR/BSURE), Atlantic Underwater Test and Evaluation Center (AUTEC) and Atlantic Fleet Weapons Training Facility (AFWTF). Test and Evaluation (T&E) ranges are Nanoose, Dabob Bay and Quinalt.</p> <p>F4001 - Pinger Exercise Components are placed in weapons and other underwater vehicles for tracking during training and T&E exercises, and to insure safe operation and movement of all craft and weapons on the ranges. In addition, pinger components are also procured to support the future Shallow Water Training Ranges at both coasts and Hawaii.</p> <p>F4003 - Recovery Equipment is used on T&E ranges for recovering weapons on or buried in the sea floor. Approximately \$10 million of hardware is recovered each year using these devices.</p> <p>F4004 - The T&E Range Equipment line provides for improvement and modernization of range equipment for YTT (Yard Torpedo Tender) and test crafts; portable tracking range components used at remote sites for testing requirements in different sea-bottom, littoral and cold water environments; and other range systems in support of weapon T&E operations.</p> <p>F4005 - The ASW Target MK 30 Mod 1 provides essential fleet ASW training on the Navy's underwater tracking ranges. The MK 30 Mod 1 is currently used at the BARSTUR - Hawaii, AUTEC - Bahamas, AFWTF - St. Croix, Virgin Islands and SCORE. ASW range support funds are used to procure components for the MK 30 that are consumed/expended during fleet in-water runs. These funds are also used to replace obsolete components and improve maintenance and reliability of the targets.</p> <p>F4006 - The stationary target components include the MK 28 Targets, and T&E Targets. MK 28 Targets are used for conducting Service Weapons Test (SWT) on in-service and advanced warshot torpedoes. The SWT is the only test the Navy has to verify the explosive chain of torpedoes. Funding is used to procure target systems and components expended during SWT operations in addition to improvement and modernization projects. The T&E targets include the MK 69, a bottom mounted stationary target, and Over-The-Side (OTS), a surface deployed target, used to test various weapon attributes during T&E exercises. These targets are needed to fill specific technical requirements for the MK 48 ADCAP, MK 50 and MK54 torpedo upgrades. Funding is used to procure components that improve operability and maintenance of the target.</p> <p>F4007 - This is a Congressional plus-up to support the Northwest Range Complex that provides the test resources for acceptance testing for USW system acquisition. Funding will provide for upgrade/refurbishment of existing range systems that are required to keep the Range Complex viable. The major systems that require upgrade/refurbishment are: Range Craft and Craft Systems, Fire Control and Instrumentation, and Engineering and display systems.</p> <p>Production Engineering funds support efforts performed by a field activity or contractor during the production phase of these projects.</p>												

P-1 SHOPPING LIST

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WEAPONS SYSTEM COST ANALYSIS P-5							Weapon System						DATE: February 2002			
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy BA 3 - Torpedoes and Related Equipment							ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD ASW Range Support BLI: 330200 SBHD: 83F4/73F4								
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS													
			Prior Years				FY 2001			FY 2002			FY 2003			
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	
	N76															
F4001	Pinger Exercise Components								223			272			249	
F4003	Recovery Equipment								41			52			47	
F4004	Test & Evaluation Range Equipment								253			272			277	
F4005	MK 30 Components								358			300			281	
F4006	Stationary Target Components								114			146			144	
F4007	NW Range Upgrade								397			386			0	
F4830	Production Engineering In-House								261			238			236	
F4850	Product Improvement								195			164			163	
F4900	Production Engineering - Contractors								22			18			14	
	N77															
F4001	Pinger Exercise Components								1,578			1947			1,861	
F4003	Recovery Equipment								287			374			350	
F4004	Test & Evaluation Range Equipment								1,794			1968			2,063	
F4005	MK30 Components								2,502			2169			2,127	
F4006	Stationary Target Components								804			1051			1,064	
F4007	NW Range Upgrade								2,815			2442			0	
F4830	Production Engineering In-House								1,844			1709			1,762	
F4850	Product Improvement								1,375			1180			1,209	
F4900	Production Engineering - Contractors								160			130			107	
	N78															
F4001	Pinger Exercise Components								439			168			162	
F4003	Recovery Equipment								80			32			30	
F4004	Test & Evaluation Range Equipment								503			167			167	
F4005	MK 30 Components								705			1127			1,003	
F4006	Stationary Target Components								224			90			93	
F4007	NW Range Upgrade								788			643			0	
F4830	Production Engineering In-House								516			654			626	
F4850	Product Improvement								385			425			408	
F4900	Production Engineering - Contractors								44			44			34	
	N6															
F4001	Pinger Exercise Components											24				
F4005	MK30 Components											16				
									18,707			18,208			14,477	

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BUDGET ITEM JUSTIFICATION SHEET P-40					DATE: February 2002		
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy BA - 3 Torpedoes and Related Equipment			P-1 ITEM NOMENCLATURE BLI 2410 FIRST DESTINATION TRANSPORTATION (FDT) / 93TA				
	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007
COST (In Millions)	1.8	2.8	2.8	2.9	3.2	3.3	3.3
<p>First Destination Transportation (FDT) provides for the movement of newly procured equipment and material from the contractor's plant to the initial point of receipt for subsequent shipment to its destination .</p>							

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WEAPONS SYSTEM COST ANALYSIS							DATE:	
P-5							February 2002	
APPROPRIATION/BUDGET ACTIVITY			P-1 ITEM NOMENCLATURE/SUBHEAD					
Weapons Procurement, Navy			First Destination Transportation (FDT) / 93T					
BA 3 Torpedoes and Related Equipment								
COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS					
			FY 2001		FY 2002		FY 2003	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
TA001	First Destination Transportation			1,825		2,778		2,751

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BUDGET ITEM JUSTIFICATION SHEET P-40								DATE: February 2002					
APPROPRIATION/BUDGET ACTIVITY WEAPONS PROCUREMENT, NAVY BA-4: OTHER WEAPONS								P-1 ITEM NOMENCLATURE/LINE ITEM # SMALL ARMS AND WEAPONS - BLI #412900 24E3					
Program Element for Code B Items:								OTHER RELATED PROGRM ELEMENTS					
	Prior Years	ID Code		FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total
QUANTITY													0
EQUIPMENT COST (In Millions)	N/A				\$4.0	\$0.9	\$2.9	\$3.3	\$1.1	\$6.1	\$1.2		\$19.5
SPARES COST (In Millions)													\$0.0

PROGRAM DESCRIPTION/JUSTIFICATION:

Quantities of weapons procured with the above funding are to meet small arms allowances and inventory objectives.

This line item provides for initial issue procurement, modernization, standardization and stock replenishment procurement of a wide variety of small arms and weapons (caliber .50 and below), including required gun mounts and associated support components. The line also provides for procurement of sufficient types and quantities of weapons to support training, security afloat and shore missions of approximately 2,495 ship/ashore activities Navy-wide.

The FY 2003 program reflects increases for the procurement of M240 Machine guns for 20 Naval Mobile Construction Batalion (NMCBs), 2 Naval Construction Force Support Units (NCFSUs) and 2 Construction Battalion Maintenance Units (CBMUs) (SEABEES), and the procurement of Mobile Security Force equipment.

Non-Add:

FY 2002 DERF: Provided \$10M for procurement of Physical Security Equipment, including equipment for Mobile Security Forces. This includes: M240B and M240N Machine Guns, MK46 Lightweight Machine Guns, M4 Machine Guns, Mk-19 Grenade Launchers, Mk-50 Machine Guns, M82 Sniper Rifles, 12Ga Shotguns, M11 Pistols, M4A1 Rifles, gun mounts, and other related equipment.

FY 2003 Cost of War: Provide \$4M for procurement of Physical Security Equipment, including equipment for Mobile Security Forces. This includes: M4 Machine Guns, Mk-19 Grenade Launchers, Mk-50 Machine Guns, gun mounts, and other related equipment.

	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>
Funding Totals	\$3,983	\$902	\$2,856
Non-Add:			
FY 2002 DERF		\$10,000	
FY 2003 COW			\$4,000

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BUDGET ITEM JUSTIFICATION SHEET P-40											DATE: February 2002	
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy							P-1 ITEM NOMENCLATURE Airborne Mine Neutralization System/422500/74S0					
Program Element for Code B Items: 0604373N Airborne Mine Countermeasures							Other Related Program Elements					
	ID Code	Prior Years		FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Program
QUANTITY												
COST (\$M)	B	\$0.0		\$0.0	\$0.0	\$1.5	\$1.6	\$1.9	\$12.7	\$21.7	CONT.	CONT.
Initial Spares (\$M)	B	\$0.0		\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	CONT.	CONT.
<p>PROGRAM DESCRIPTION/JUSTIFICATION:</p> <p>Airborne Mine Countermeasures (AMCM) Equipment is currently used by MH-53E helicopters to counter the threat of sea mines. The MH-60S helicopter will be adapted for the AMCM mission in support of the development of an Organic Fleet AMCM program. The equipment is divided into two broad categories -- minesweeping and minehunting. (1) Minesweeping is performed by mechanical or influence sweeps. In mechanical sweeping, the mine mooring is severed by the sweep gear allowing the mine to float to the surface where it is destroyed. In influence sweeping, a magnetic or acoustic field which simulates the magnetic/acoustic signature of a ship is introduced into the water. This field causes the mine mechanism to actuate. (2) In mine hunting, the object is to actually locate and classify minelike objects (usually by means of high resolution sonar) and mark or neutralize mines using explosive devices. AMCM squadrons currently have mechanical, magnetic, and acoustic sweeping capabilities, and mine surveillance and marking capabilities. Their mission is to locate, classify and neutralize moored and bottom mines.</p> <p>Airborne Mine Neutralization System (AMNS) is composed of an Operator Control Subsystem and both a MK62 explosive or MK63 inert neutralizer subsystem deployed from the helicopter platform to reacquire, identify, and neutralize moored or proud bottom sea mines. FY 2002 - FY 2003 procurements support the MH-53E airframe.</p> <p>Rapid Airborne Mine Clearance System (RAMICS) program will satisfy the U.S. Navy's need for rapid mine clearance capability required to neutralize near-surface and surface (floating) moored sea mines. RAMICS will use geo-location data provided by other minehunting and mine reconnaissance systems, use a laser system to reacquire targets and to direct the fire of supercavitating projectiles that will render the mines inoperable. RAMICS includes the following major subsystems and components:</p> <ul style="list-style-type: none"> (a) Subsystem (including gun and turret) (b) Munition Subsystem - MK258 Mod 1 Armor Piercing, Fin Stabilized, Discardig Sabot-Tracer (APFSDS-T) munition subsystem (c) Targeting Sensor Subsystem (d) Fire Control Subsystem (e) Software <p>The system will be deployed from the MH-60S helicopter and will provide organic airborne mine defense for Carrier Battle Groups (CVBG) and Amphibious Ready Groups (ARG). This capability will be of critical importance in littoral zones, confined straits, choke points, and the Amphibious Objective area (AOA).</p> <p>Code B items PE #0604373N AMNS (MH-53E) DT FEB 01 - DEC 01 OT JAN 02 - MAR 02 TDP JAN 02 MS C / LRIP APR 02</p>												

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BUDGET ITEM JUSTIFICATION SHEET P-40							DATE: February 2002					
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy/BA-4							P-1 ITEM NOMENCLATURE 4205 MK-15 CLOSE-IN WEAPON SYSTEM (CIWS) MODS-24DT					
Program Element for Code B Items:							Other Related Program Elements					
	Prior Years	ID Code	FY 2000 and Prior	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Program
QUANTITY		A	13	15	6	9	3	31	22	35	157	291
COST (M\$)		A	36.2	25.9	44.1	32.2	21.9	77.9	104.2	117.0	848.8	1308.1
Emergency Relief Fund * (M\$)								43.9	79.4	177.7		
<p>* ERF,D Funding to procure CIWS BLOCK 1B mods.</p> <p>JUSTIFICATION: PHALANX CLOSE-IN WEAPON SYSTEM (CIWS) IS A HIGH FIRE RATE WEAPON SYSTEM THAT AUTOMATICALLY ACQUIRES, TRACKS, AND DESTROYS ANTI-SHIP MISSILES (ASMS) THAT HAVE PENETRATED ALL OTHER SHIP'S DEFENSES.</p> <p>CIWS BLOCK 1B: THIS LINE IS AN UPGRADE/CONVERSION TO CIWS INCORPORATING A STABILIZED THERMAL IMAGER AND AN AUTOMATIC ACQUISITION VIDEO TRACKER THAT PROVIDES THE ADDITIONAL CAPABILITY TO ENGAGE SMALL, HIGH SPEED, MANEUVERING SURFACE CRAFT AND LOW, SLOW AIRCRAFT AND HELICOPTERS. THE THERMAL IMAGER ALSO IMPROVES PERFORMANCE AGAINST ANTI-SHIP CRUISE MISSILES BY PROVIDING MORE ACCURATE ANGLE TRACKING INFORMATION TO THE FIRE CONTROL COMPUTER. CIWS BLOCK 1B IS SCHEDULED TO BE INSTALLED ON THE FOLLOWING SHIP CLASSES: AGFS, AOES, CGS, CVS, CVNS, DDS, DDGS, FFGS, LCCS, LHAS, LHDS, LPDS, LSDS, LST, MSC, WHECS AND TRAINERS. THE INSTALLATION WILL BE INSTALLED DURING A LIMITED AVAILABILITY BY SHIPALT/AIT.</p> <p>INITIAL SPARES ARE INCLUDED AS PART OF THE CIWS IB PROCUREMENT.</p> <p>EQUIPMENT INSTALLATION: FUNDING IS FOR THE INSTALLATION OF EQUIPMENT, INCLUDING FLEET MODERNIZATION PROGRAM INSTALLS, AND INSTALLATION OF EQUIPMENT AT SHORE FACILITIES</p>												

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P3A INDIVIDUAL MODIFICATION																					
MODELS OF SYSTEM AFFECTED: <u>PHALANX CIWS BLOCK I</u>				TYPE MODIFICATION: <u>UPGRADE</u>				MODIFICATION TITLE: <u>UPGRADE AND CONVERSION TO BLOCK</u>													
DESCRIPTION/JUSTIFICATION:																					
THE BLOCK IB SURFACE MODE MOUNT INCLUDES THE ADDITION OF A THERMAL IMAGER, AN AUTOMATIC ACQUISITION VIDEO TRACKER AND STABILIZATION SYSTEM FOR THE TRACKER. THE UPGRADE IS ESSENTIAL TO PROVIDE THE FLEET CAPABILITY AGAINST SMALL HIGH SPEED SURFACE THREATS AND LOW SLOW SPEED AIR THREATS.																					
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: <u>COMPLETE</u>																					
<div style="display: flex; justify-content: space-between;"> <div style="text-align: center;"> FY 2000 <u>& Prior</u> QTY \$ </div> <div style="text-align: center;"> FY 2001 QTY \$ </div> <div style="text-align: center;"> FY 2002 QTY \$ </div> <div style="text-align: center;"> FY 2003 QTY \$ </div> <div style="text-align: center;"> FY 2004 QTY \$ </div> <div style="text-align: center;"> FY 2005 QTY \$ </div> <div style="text-align: center;"> FY 2006 QTY \$ </div> <div style="text-align: center;"> FY 2007 QTY \$ </div> <div style="text-align: center;"> TC \$ </div> <div style="text-align: center;"> TOTAL QTY \$ </div> </div>																					
FINANCIAL PLAN (IN MILLIONS)																					
<u>RDT&E</u>		40.300																		40.300	
<u>PROCUREMENT</u>																					
CIWS BLOCK IB PROCUREMENT	13	29.000	15	24.967	4	33.998	9	23.488	3	17.256	29	64.159	22	100.019	35	106.336		152	788.361	282	1187.584
TRAINERS					2	5.806					2	8.042						5	17.310	9	31.158
OTHER (GRAY RADOMES)					60	0.480	60	0.488	60	0.498	60	0.508	60	0.519	50	0.442				350	2.935
PRODUCTION ENGINEERING SUPPORT		5.100				1.966		3.319		2.366		2.831		2.502		4.306					22.390
DSA SERVICES						1.000		3.017													4.017
INSTALL COSTS	2	2.090	8	0.888	3	0.880	10	1.914	11	1.797	9	2.333	3	1.148	31	5.900		214	43.091	291	60.041
TOTAL PROCUREMENT		36.190		25.855		44.130		32.226		21.917		77.873		104.188		116.984			848.762		1308.125

*DSA FUNDING FOR ALL SHIP CLASSES IS BUDGETED IN FY02/03 TO ALLOW FOR INSTALLATION ON ANY CLASS SHIP IN OUT YEARS.

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P3A (Continued)		INDIVIDUAL MODIFICATION (Continued)																							
MODELS OF SYSTEMS AFFECTED: <u>PHALANX CIWS BLOCK I</u>										MODIFICATION TITLE: <u>UPGRADE AND CONVERSION TO BLOCK IB</u>															
INSTALLATION INFORMATION:																									
METHOD OF IMPLEMENTATION: Block IB Surface Mode will be accomplished through upgrade/conversion by OEM.																									
ADMINISTRATIVE LEAD-TIME <u>6 MONTHS</u>											PRODUCTION LEADTIME: <u>22 MONTHS</u>														
CONTRACT DATES: FY 2000: <u>NONE</u>											FY 2001: <u>MAR 2001</u> FY 2002: <u>DEC 2001</u>														
DELIVERY DATE: FY 2000: <u>NONE</u>											FY 2001: <u>FY03</u> FY 2002: <u>FY04</u>														
(\$ in Millions)																									
Cost:		Prior Years		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007						To Complete		Total	
		Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$					Qty	\$		\$
PRIOR YEARS		2	2.090	8	0.888	3	0.480																	13	3.458
FY 2001 EQUIPMENT							0.347	10	1.706															10	2.053
FY 2002 EQUIPMENT							0.050			11	1.722													11	1.772
FY 2003 EQUIPMENT									0.208			9	1.525											9	1.733
FY 2004 EQUIPMENT											0.075			3	0.562									3	0.637
FY 2005 EQUIPMENT													0.808			31	5.277							31	6.085
FY 2006 EQUIPMENT															0.586							22	4.138	22	4.724
FY 2007 EQUIPMENT																	0.623					35	5.79	35	6.413
TO COMPLETE																						157	31.954	157	31.954

INSTALLATION SCHEDULE: Input=DELIVERY FROM OEM, Output=INSTALLATION ON SHIPS																																			
		FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				FY 2006				FY 2007				TC	TOTAL
		& Prior																																	
In	10	0	0	0	3	0	0	0	0	0	0	5	5	5	2	2	2	3	3	3	0	0	3	0	0	7	8	8	8	157	291				
Out	2	2	2	0	4	1	0	1	1	0	0	5	5	5	2	2	2	0	3	3	3	0	0	3	0	7	8	8	8	157	291				

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BUDGET ITEM JUSTIFICATION SHEET P-40										DATE: February 2002	
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy / BA-4: OTHER WEAPONS						P-1 ITEM NOMENCLATURE BLI: 4217 GUN MOUNT MODS					
Program Element for Code B Items:						Other Related Program Elements					
	Prior Years	ID Code	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Program
QUANTITY											0
COST (\$M)			\$29.9	\$26.5	\$8.4	\$20.6	\$26.4	\$18.9	\$11.2	\$7.6	\$149.5
Initial Spares (\$M)											\$0.0
<p>E5001 - 5" GUN MOUNT MODS: This element procures gun safety and shock hardening ORDALTs for 5" MK 45 gun mounts.</p> <p>E5002 - MINOR CALIBER MODS: This element procures ORDALTs and miscellaneous equipment required to improve safety and reliability for the 25MM MK 38 Machine Gun System and all other minor caliber ordnance much of which is outdated and difficult to support. It provides initial fill kits and replacement of surveyed and outdated minor caliber ordnance for active ships. This element also procures MK 11 saluting mounts and related components.</p> <p>E5003 - 76MM GUN MOUNT MODS: This element procures safety/shock ORDALTs for 76MM MK 75 gun mounts. These ORDALTs will provide safety improvements for USN FFG 7 Class ships, USCG WMEC 270, and USCG WHEC 378 cutters.</p> <p>E5004 - CONGRESSIONAL ADD FOR MK 45 MOD 4</p> <p>E5005 - CG CONVERSION MK 45 GUN MOUNT UPGRADE: This element procures modifications and associated technical and logistics support to upgrade MK 45 Gun Mounts to a Mod 4 configuration in support of the Cruiser Conversion Program. These modifications include: Gun Mount preparation, Mod 4 Kits, 5"/62 caliber Gun Barrels, Assembly and Test, and ERGM Handling Mechanism. The upgraded Gun Mount will be capable of firing Extended Range Guided Munitions and extend the range of ballistic ammunition.</p>											

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WEAPONS SYSTEM COST ANALYSIS P-5						Weapon System							DATE: February 2002		
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy/BA-4						ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD GUN MOUNT MODS/4217 (14E5)								
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS												
			Prior Years	FY 2001			FY 2002			FY 2003					
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost			
E5001	5" Gun Mount Mods		0			1,339			1,580			3,724			
E5002	Minor Caliber Mods		0			1,743			1,069			1,985			
E5003	76MM Gun Mount Mods		0			1,849			1,775			2,642			
E5004	MK 45 MOD 4		0			25,000			21,000			0			
E5005	CG Conversion MK 45 Gun Mount Upgrade		0			0			1,100			0			
			0			29,931			26,524			8,351			

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